FOUNDED IN 1856

RAILWAY AGE

MAY 28, 1949

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THE NEWEST IN STATION HEATING

RADIANT HEATING

LOOK FOR THE PIPE WITH THE RED SPIRAL STRIPE

with

BYERS WROUGHT IRON PIPE

As the early installations prove their value, more and more new stations are being equipped with Radiant Heating. The views above show the Prince, West Virginia station on the C&O and the New Hyde Park and Kings Park stations on the Long Island. Others built and under way are at Cold Spring Harbor, L.I.; Burlington, N.J.; and Akron, O.

The passenger waiting room facilities at Kings Park Station on the Long Island system, 31 x 22 feet in size, include ticket office, lavatories, telephone booths, drinking fountain and benches. Adjoining are an unheated utility room and an unheated baggage and freight room. The radiant heating installation consists of four separate panels of welded wrought iron pipe, each with its own return main. This permits necessary "balancing" to provide comfortable working conditions for the station agent, without overheating the waiting area where occupants are dressed for outdoors. Coils are embedded in a 5-inch concrete floor resting on a 6-inch stone fill. Hot water from an oil-fired boiler is circulated by a thermostat-controlled pump.

Station heating has always presented problems, from the standpoint of expense, space, and maintenance of comfort conditions. Results to date indicate that radiant heating is a completely satisfactory solution. It can be economically installed in large or small structures. It leaves all floor space available for use. It does not depend on heated air to maintain comfort conditions—so the effects of high infiltration are greatly reduced. Wrought iron is by far the favorite for the pipe material, because of its ease of fabrication, its high heat emission, the fact that it expands and contracts at practically identical rates with concrete, and its demonstrated corrosion resistance.

If you do not have our bulletin, WROUGHT IRON FOR RADIANT HEATING INSTALLATIONS, we will be glad to send a copy.

A. M. Byers Co., Pittsburgh, Pa. Established 1864. Boston, New York, Philadelphia, Washington, Atlanta, Chicago, St. Louis, Houston, Salt Lake City, Seattle, San Francisco. Export Division: New York, N. Y.

CORROSION COSTS YOU MORE THAN WROUGHT IRON

BYERS

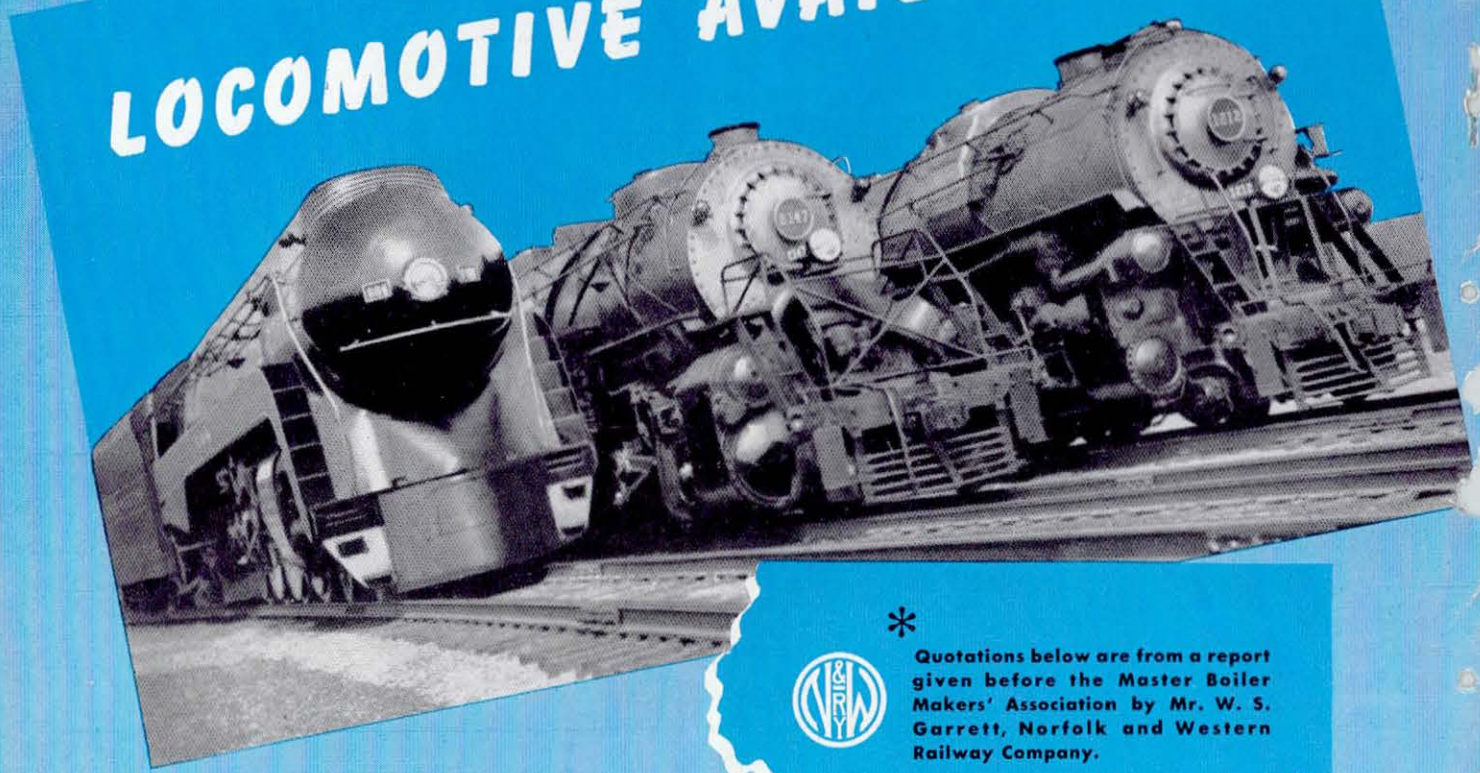
GENUINE WROUGHT IRON

TUBULAR AND HOT ROLLED PRODUCTS

ELECTRIC FURNACE QUALITY ALLOY AND STAINLESS STEEL PRODUCTS

the NORFOLK AND WESTERN reports on

LOCOMOTIVE AVAILABILITY *



* Quotations below are from a report given before the Master Boiler Makers' Association by Mr. W. S. Garrett, Norfolk and Western Railway Company.

48% Increase in Tractive Power Pound Miles

50% Reduction in Locomotives Owned

● "With a 48 per cent increase in tractive power pound miles required to handle the business, locomotives owned have been reduced 50 per cent and average daily locomotive miles has been increased 76 per cent, this within a period of 25 years.

"Perhaps the greatest advance toward improved availability has been brought about by the water chemist.

"Through the use of anti-foam compounds, we have reduced foaming reports to a system average of about one in each 600 dispatchments. Terminal blowdown, except for a ten second blow to remove sludge, has been practically eliminated. The elimination of terminal blowdown has saved about 30 minutes in bad water territory at each dispatchment."

Nalco is proud to be a contributor to the vastly increased efficiency of Norfolk and Western locomotives. Original research and painstaking road tests which helped to make this fine record possible will continue as an integral part of the Nalco program of water treatment service to the railroads of the world.

NATIONAL ALUMINATE CORPORATION
6216 West 66th Place **Chicago 38, Illinois**

Canadian inquiries should be addressed to Alchem, Limited, Burlington, Ontario

THE *Nalco* **SYSTEM** • **Serving Railroads through Practical Applied Science**

Inland Steel, too, Is "Blueprinted" to *Your* Needs

Just as an architect provides blueprints for personalized homes, Inland furnishes steel made to suit *your* individual requirements. Inland's flexibility of operation—made possible by its completely integrated organization with centralized facilities and localized responsibility—permits Inland to render this "tailored-steel" service. You know, when you order from Inland, that *your* steel—checked and rechecked through each phase of production—will have the specific qualities and characteristics you desire.

INLAND STEEL CO., 38 South Dearborn Street, Chicago 3, Illinois. Sales Offices: Chicago, Davenport, Detroit, Indianapolis, Kansas City, Milwaukee, New York, St. Louis, and St. Paul.

INLAND STEEL

BARS • STRUCTURALS • PLATES
SHEETS • STRIP • TIN PLATE
FLOOR PLATE • PILING • RAILS
TRACK ACCESSORIES

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This "Inland Team"
Gives Your Steel
Their Personal Attention

METALLURGY SALES OPERATIONS

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn. under the act of March 3, 1879. Subscription price $6.00 for one year. U. S. and Canada. Single copies, 50 cents each. Vol. 126, No. 22.

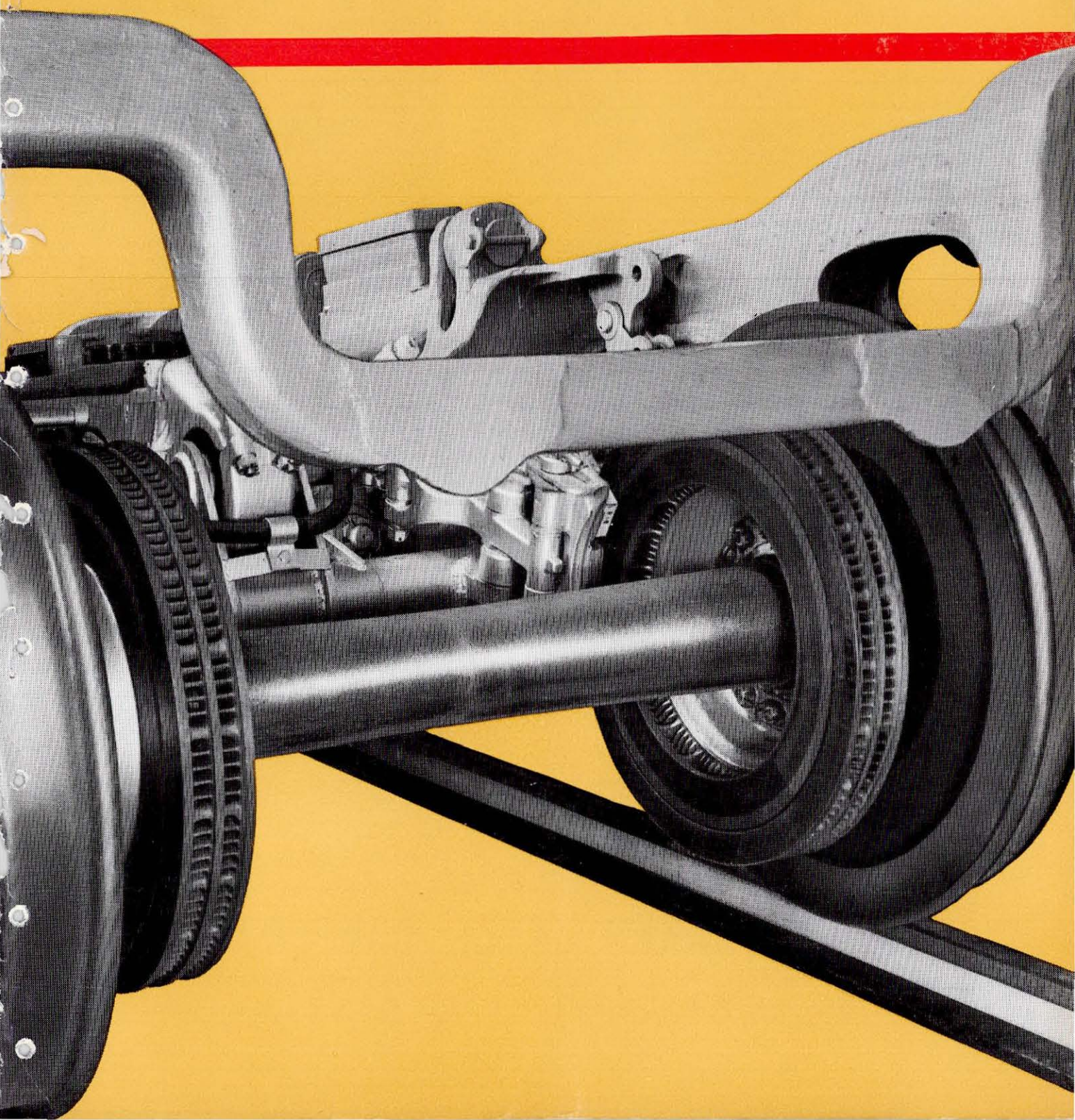
55 More Cars With Budd Disc

The orders come from two railroads. Four sets are for Lackawanna cars being built by Budd. The balance are being delivered to The Pullman-Standard Car Manufacturing Company for installation in ten Lackawanna cars and forty-one Southern Pacific cars.

This brings to nine the number of different railroads which have selected this modern and superior brake, which permits an average of 100,000 miles between brake-shoe changes, cuts wheel wear in half, eliminates heat checking, stops faster, and reduces overall car weight by more than a thousand pounds. We will be glad to demonstrate this brake to your railroad. The Budd Company, Philadelphia 32.

Budd

Being Equipped Brake (Model CF)



GONDOLAS—It is apparent that gondola supply will tighten up within the next few weeks and that the railroads will have considerable difficulty in meeting requirements for this type of equipment during most of 1949—AAR Car Service Division Report (Jan. 20, 1949).

TO END THE SHORTAGE BUILD DOUBLE-DUTY GONDOLAS

At the Chicago Railroad Fair, the Pennsylvania Railroad displayed this panel in one of a series of PRR gondolas equipped with Nailable Steel Flooring.

THE PENNSYLVANIA IMPROVES SERVICE TO INDUSTRY WITH PROGRESSIVE FREIGHT CAR CONSTRUCTION
This gondola car is equipped with NAILABLE STEEL FLOORING. Unlike ordinary gondolas, it handles all types of open-top freight because the floor is both:
NAILABLE – for hauling finished goods
And
DURABLE – for loading rough heavy freight
A BLOCKED LOAD–Wood blocking nailed to floor keeps machinery in place in the car. Heretofore this has required a wood floor car.
A SKIDDED "FLOATING" LOAD–Wooden "guide strips" prevent sidewise movement of sheet steel bundles. Under this method, friction prevents excessive lengthwise movement of the bundles.
PIG IRON–MAGNET LOADED is rough on car floors. Until now this service has called for steel-plate floor cars which, however, cannot be used for blocked loads.
CLAMSHELL BUCKETS–It takes durability to stand up under this ten-ton giant. NAILABLE STEEL FLOORING does it without loss of flatness or nailability.
Because NAILABLE STEEL FLOORING handles both rough and finished freight, this car is more useful to shippers than either type of ordinary gondola. It represents the Pennsylvania tradition of providing the latest developments in efficient freight transportation.

ALL-PURPOSE NAILABLE STEEL FLOORING

TAKES EVERY KIND OF GONDOLA FREIGHT

Gondola supply tightens up not only because there aren't enough gondolas, but also because most of them can't be used for every kind of open-top freight. *Wood* floor gondolas take blocked loads but suffer severe damage when used for rough and heavy freight . . . and conventional *steel* floor gondolas take rough and heavy freight but can't take blocked loads because they're not nailable.

Many plants and loading areas use more of one kind of car than the other. When cars on hand are the wrong type for loading, wasteful, empty movement between plants and areas is required to get the right cars in the right place.

Gondolas with NAILABLE STEEL FLOORS don't make these wasteful, empty trips because they carry *both* rough freight and finished goods. They take nails easily, hold them tight, and make an excellent surface for blocked and skidded loads. Made of tough, corrosion-resistant N-A-X HIGH-TENSILE steel, they stand up under the roughest magnet and clamshell loading. They're double-duty cars—100 per cent efficient.

By minimizing empty car movement, NAILABLE STEEL FLOORS reduce railroad operating costs and increase the supply of useful cars to shippers. For new cars, for rebuilding old cars, specify NAILABLE STEEL FLOORING.

NAILABLE STEEL FLOORING
A GREAT LAKES STEEL PRODUCT

PATENTS PENDING

GREAT LAKES STEEL CORPORATION

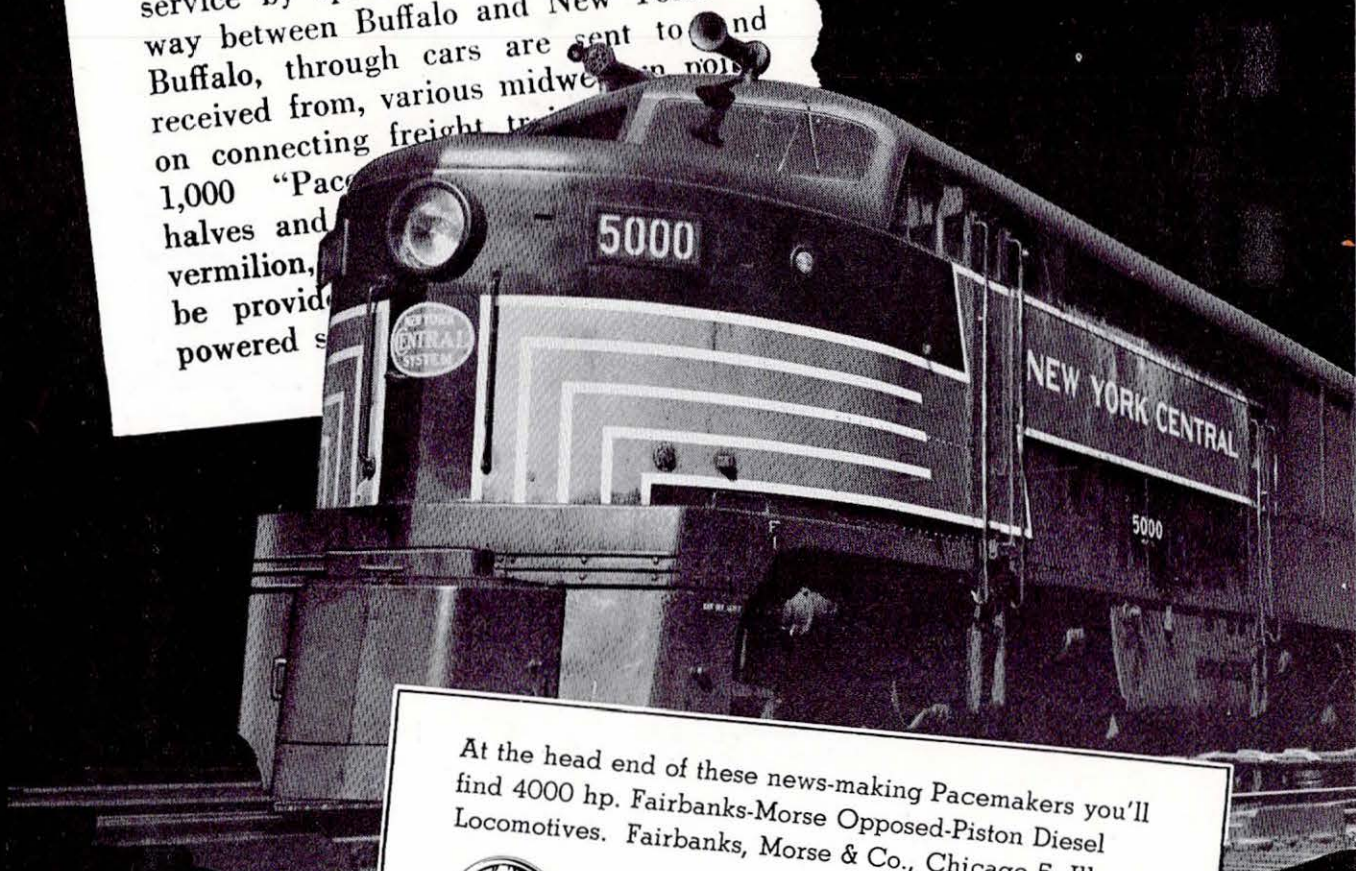
Steel Floor Division • Penobscot Building • Detroit 26, Michigan

UNIT OF NATIONAL STEEL CORPORATION

Railway Age—April 23, 1949

N. Y. C. Extends "Pacemaker" Freight Service to New England

The New York Central's "Pacemaker" freight service will be extended to and from New England on April 25. Through inauguration of two new trains on overnight runs each way between Boston, Mass., and Buffalo, N. Y., Massachusetts will be linked in "second morning" delivery with cities in New York, Ohio, Michigan, Indiana, West Virginia and Kentucky. The New England "Pacemaker," which will stop in both directions at Worcester, Mass., Springfield, Pittsfield, Albany, N. Y., Utica, Syracuse and Rochester, follows the previous establishment of "Pacemaker" freight service by special trains overnight each way between Buffalo and New York. At Buffalo, through cars are sent to and received from, various midwe[illegible] on connecting freight tr[illegible] 1,000 "Pac[illegible] halves and [illegible] vermilion, [illegible] be provid[illegible] powered s[illegible]



At the head end of these news-making Pacemakers you'll find 4000 hp. Fairbanks-Morse Opposed-Piston Diesel Locomotives. Fairbanks, Morse & Co., Chicago 5, Ill.

FAIRBANKS-MORSE,
a name worth remembering

DIESEL LOCOMOTIVES • DIESEL ENGINES • PUMPS • SCALES • MOTORS • GENERATORS
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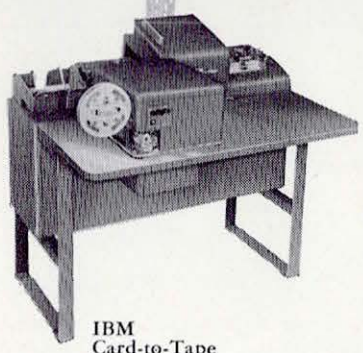
ANOTHER *Advance* IN RAILROAD OPERATION



IBM
Card-to-Tape
Machine

NEW SYSTEM *Speeds* SERVICE

IBM Card-to-Tape and Tape-to-Card Machines permit automatic wire transmission of punched card information, speeding the preparation and recording of all car service data, including the following:

In the Yards

Interchange Reports
Advance Consists
Wheel Reports
Passing Reports

In the Car Service Office

Current Car Movement Records
Monthly Car Movement Records
Per Diem Calculation
Car Counts
Daily Consolidated Passing Reports
Car Tracing and Distribution Information

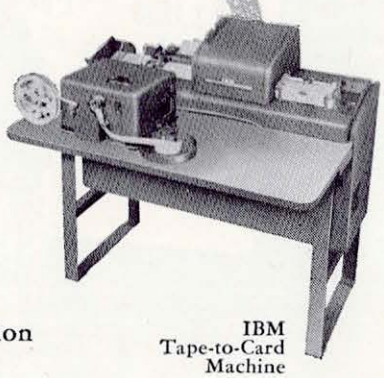
In the Superintendent's Office

Complete Train Consists
Passing Reports

In the Traffic Office

Shipper and Consignee Analyses

In addition, all types of special reports can be obtained from the same basic records. For complete information about this IBM development, ask to have an IBM representative call at your office.



IBM
Tape-to-Card
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INTERNATIONAL BUSINESS MACHINES CORPORATION

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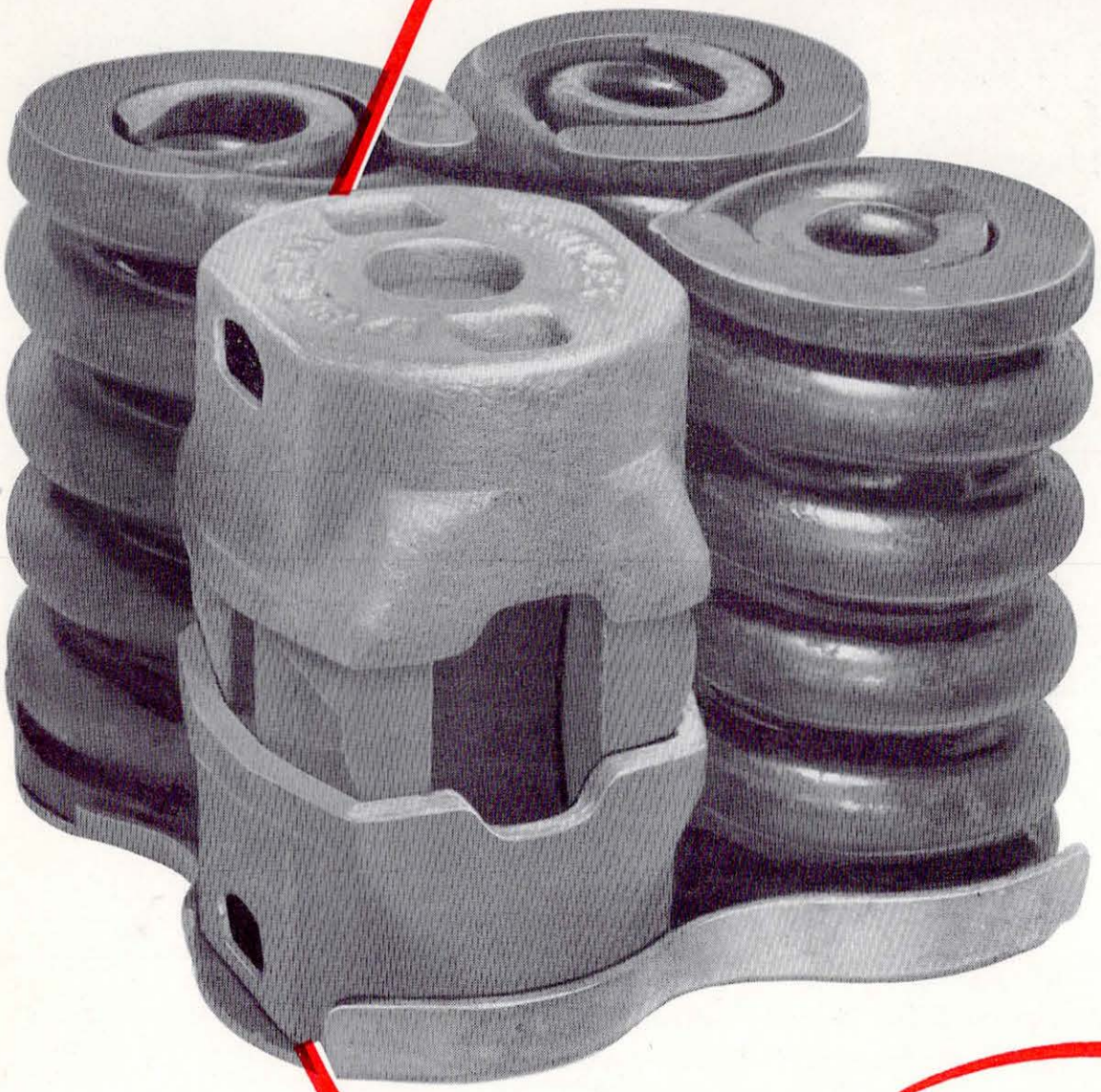
SIMPLEX UNIT-TYPE SNUBBERS



...for the Smoothest Ride an AAR COIL-SNUBBER GROUPING Can Deliver!

Ask for the PERFORMANCE Facts and Figures

AMERICAN STEEL FOUNDRIES

MINT MARK OF FINE CAST STEEL

The Rocky Mountain Rocket, operating daily between Chicago and the Denver-Colorado Springs area, is one of Rock Island's finest trains. Here it is shown against the gorgeous background of the Pike's Peak country.

Public Servant

High on the list of dependable public servants is the railroad, a giant that knows no holiday. So completely reliable is this giant that he is taken for granted, though nothing could duplicate his enormous services to the country. . . . Carefully-made, thoroughly-tested equipment is of course vital to railroad operating efficiency, and this is particularly true of wheels. For many years, Bethlehem has been furnishing wrought-steel wheels to the nation's great railways, wheels that have written a record of dependability and long life. They are conscientiously made, each and every one of them. You cannot buy finer wheels anywhere.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation
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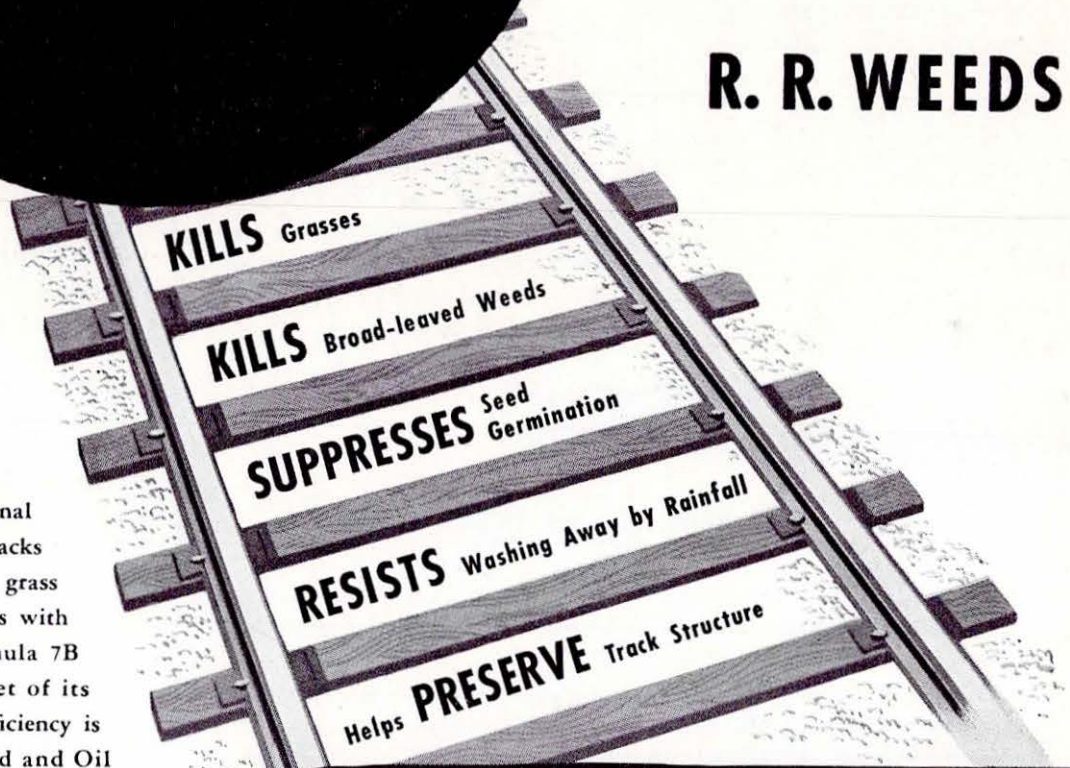
BETHLEHEM STEEL

Bethlehem **WROUGHT-STEEL WHEELS**

GENERAL CHEMICAL Formula 7B Weed Killer

DOES A *BETTER* JOB CONTROLLING R. R. WEEDS

GENERAL CHEMICAL WEED CONTROL



Not just short-term seasonal relief . . . but cleaner tracks with ultimate weed and grass *sterilization* can be yours with General Chemical Formula 7B Weed Killer. The secret of its powerful long-lasting efficiency is its Trichloroacetic Acid and Oil formula—the ideal combination for controlling weeds and grass.

"CUSTOM-PLANNED" APPLICATION SERVICE AVAILABLE

"Custom-planned" applications of Formula 7B offer complete control for all conditions. Past performance of this improved, *different* weed killer proves that *it gets results where ordinary weed killers fail!*

Weed Killer Department

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N.Y.

GET ALL THE FACTS ON FORMULA 7B

Mail this Coupon Today for Free Folder Telling What this Improved Weed Killer Can Do for You!

Weed Killer Department

General Chemical Division, Allied Chemical & Dye Corporation

40 Rector Street, New York 6, N. Y.

I want to know more about what General Chemical Formula 7B can do. Please send your folder giving complete information.

*Name*_____

*Title*_____

*Railroad Address*_____

*City*_____ *Zone*_____ *State*_____ RA-5

New system gives *better* claim service to shippers

Instant response to inquiries. Any employee can tell instantly from the claim number when it was received, what type of claim, and claim section handling it. Phone or mail inquiry is instantly referred to the actual investigator for personal answering and good relations with shipper. Complete cross-index of claim records is provided for any purpose.

...AND SAVES MANY THOUSANDS A YEAR in claim-processing costs!

Better supervision of claims. A glance at the Remington Rand Index-Visible control cards on convenient panels reveals the status of any claim account. A glance at the claim folders, filed by investigator, gives the age of each claim and enables supervisors to make quick comparisons of investigator efficiency.

Low-cost processing of claims. A single typing on the three-part carbonized gang form furnishes: (1) a postcard for acknowledging receipt of claim; (2) a control card for alphabetical filing on panels; and (3) a journal sheet for continuous numerical filing. One typist handles up to 250 incoming claims per day.

MORE QUICK FACTS..

ABOUT THIS NEW VISIBLE INDEX SYSTEM...

- The unique claim numbering system can be adapted to reveal whatever facts are significant. Suspense item accounting can be coupled with the numbering system.
- Control of claim operations is centralized in one office with fixed responsibility for filing. Clerks can be easily transferred from one claim operation to another as peaks occur.
- Investigators are freed of annoying delays and have more time for investigations.
- Stray files are quickly located because their absence is noted sooner. File operators are more efficient because many sources of fatigue have been eliminated.
- All forms and filing equipment furnished by Remington Rand with surprising low cost for total installation.
- Remington Rand offers an installation service which can relieve you of change-over burdens.

FOR COMPLETE DETAILS

of this and other installations, and a quick survey of your own claim handling problems, consult our nearest branch office. Or write direct to Transportation Systems Department, 315 Fourth Avenue, New York 10.

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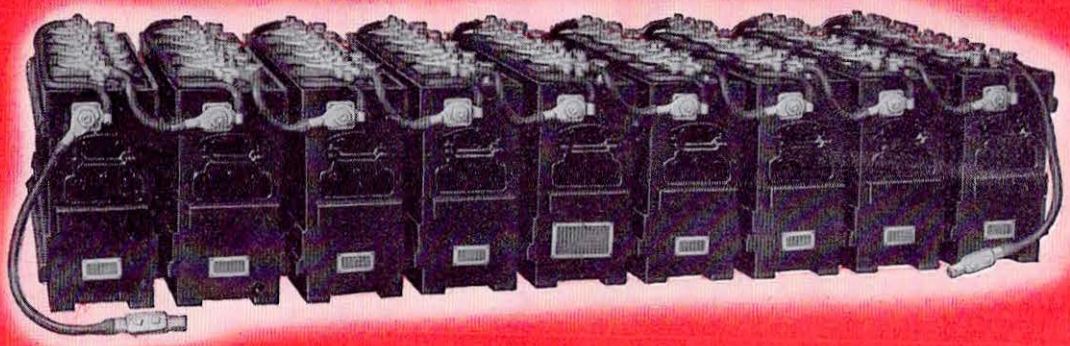
Keeping pace with railroad progress — Remington Rand — the FIRST name in business systems

LIGHTWEIGHT Power-



THAT'S ALWAYS APACE WITH PROGRESS

TODAY'S railroad passenger car designs are keynoted on comfort and convenience. The trend, therefore, is to provide greater electric power supply for improvements in air conditioning, air circulation, humidity control and illumination standards, as well as for increased use of electrical appliances.

In new axle-generator cars having electromechanical air conditioning systems with refrigerating capacities of 7 to 8 tons, for example, designers have shown a definite swing toward 64- and 110-volt systems with generators ranging from 20 kw upward and batteries of approximately 55 to 65 kwhr capacity.

The need for these higher capacities, and the increased importance of uninterrupted electric power during non-generating time on the road, serve to accentuate the desirable characteristics of EDISON Nickel-Iron-Alkaline Batteries—especially their *minimum weight* and *maximum dependability*.

From the time of their first application to railway passenger cars early in this century, these original lightweight batteries have always been apace with progress, repeatedly proving their inherent dependability to the railroad industry.

Typical batteries for 110-volt axle-generator cars. Top: half of a 90-cell A12H battery, 8-hour capacity 56.73 kwhr. Above: one of three battery boxes in each car of R F & P's latest streamliner, "The Old Dominion", showing section of an 88-cell A14H battery, 8-hour capacity 64.71 kwhr.

EDISON

Nickel • Iron • Alkaline

STORAGE BATTERIES

EDISON STORAGE BATTERY DIVISION
of Thomas A. Edison, Inc., West Orange, N. J.

Good News for Travelers

that Good Brakes help to write

Next to a top safety record, railroad men are generally proudest of a blue-ribbon record for maintaining schedules. The "On Time" chalked on the announcement board is a big factor in winning passenger patronage and building good will.

Westinghouse HSC electro-pneumatic air brake equipment helps many famous trains to build reputations for dependability. In application and release, the impulse travels the length of the train in the wink of an eye. Braking pressures are equalized automatically on all cars in the train.

The engineman can make a later application in approaching restricted speed zones, and a quicker release in leaving. Running time can be substantially reduced without increasing top speed.

For your modern passenger trains, use this modern combination: HSC AIR BRAKES . . . for braking flexibility to match modern train speeds, and unequalled smooth action. SPEED GOVERNOR CONTROL . . . for regulating brake forces to wheel speeds. AP DECELOSTAT . . . for wheel slip detection to keep the wheels rolling.

Brakes are Basic to Railroad Progress

Westinghouse Air Brake Co.

WILMERDING, PA.

Vol. 126, No. 22 May 28, 1949

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Marks Office in Canada.

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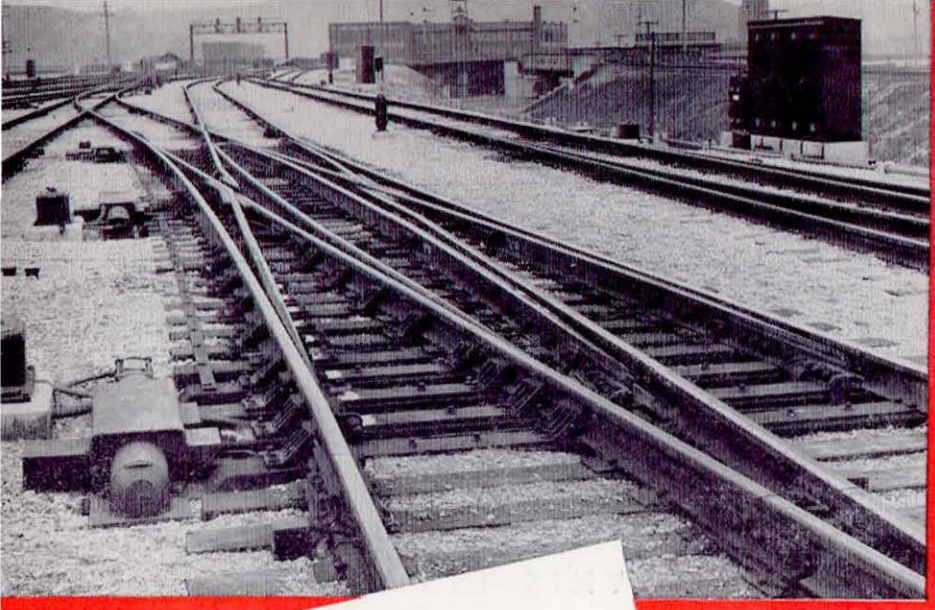
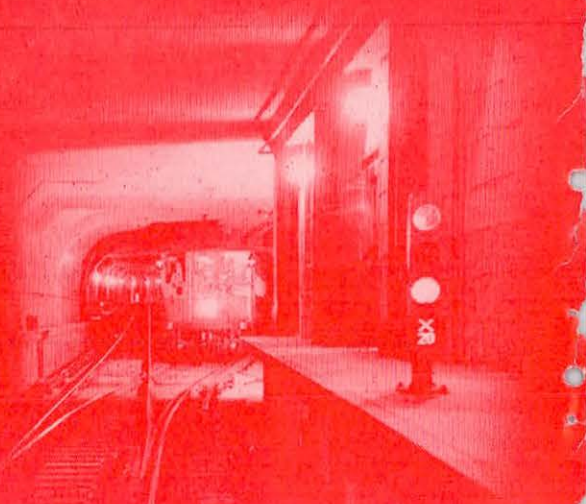
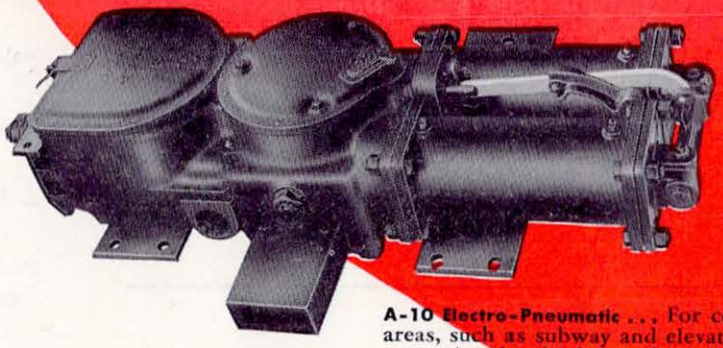


A-5 Electro-Pneumatic . . . For installations in congested areas, such as terminals where speed of operation and flexibility of application are major requirements.

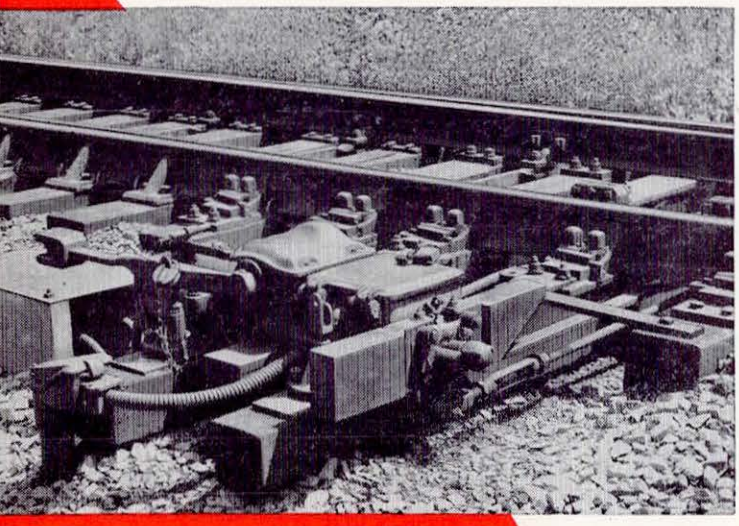


"UNION" E-P SWITCH MACHINES



A-10 Electro-Pneumatic . . . For confined areas, such as subway and elevated railways. Another high-speed movement.

For Every Power Switch Application



A-21 Dual Control Electro-Pneumatic . . . Designed especially for remote control and C.T.C. installations. A high-speed movement.

Because of their greater power . . . speed . . . and above all, reliability . . . "Union" Electro-Pneumatic Switch Machines are unsurpassed for every modern power-operated switch layout. They have the power to move switch points almost instantaneously. And with their rugged construction and simplicity of design, they assure long, dependable operation with minimum maintenance.

Remember . . . at busy interlockings (including those remotely controlled) . . . in C.T.C. territories . . . wherever swift route establishment is essential . . . the fast operation of "Union" Electro-Pneumatic Switch Machines may mean the difference between stopping and highballing a heavy tonnage freight or fast passenger train.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

MORE REGULATION? Government interference with details of train operation—one of the few fields in which railroad management still has a comparatively free hand—would be the inevitable result if bills now pending in Congress (H.R. 378 and S. 238) should be enacted. Our News pages contain an account of committee hearings on the House bill "to give the I.C.C. authority to require railroads to install and maintain communication systems and to establish and observe operating rules, regulations and practices." The bill, of course, is advocated by the brothers as a "safety" measure, particularly for track motor cars. Meantime, as an editorial on page 21 points out, many railroads are finding that portable field telephones are doing more than any legislation or bureaucratic orders could ever do to promote motor car safety—and to expedite operations as well.

IS SAVING MONEY A CRIME? Attorneys for the virulently anti-railroad Department of Justice continued their attack on the eastern railroads' Bulwinkle-Reed Act application in a hearing at Washington last week. As our News report shows, they descended to attacking the credibility of responsible traffic officers who had appeared as witnesses at earlier hearings; and they sought to introduce documents purporting to show that the Traffic Department of the Association of American Railroads had "saved" its member companies $3 million a year. Of course we know that "saving" hasn't been popular in Washington for—well, some years—but we always thought one of the most important functions of *any* industrial association was to help to save money for its members. Looks to us as though the A.A.R.'s success should entitle it to a pat on the back from any impartial observer.

TO CLEAR UP THE BACKLOG: One of the week's major developments was the signing, by the railroads on the one hand, and the five big operating brotherhoods on the other, of two agreements which are "confidently expected" to "dissipate" the tremendous backlog of grievance cases pending before the First Division of the National Railroad Adjustment Board. The nature and purposes of the agreements are outlined in the News section.

4½ MILLION MILES—is a long way. But it's the total distance covered by the Chicago, Burlington & Quincy's two 12-unit "Denver Zephyrs" in nearly 13 years of revenue service. They have, it would seem, well earned the complete general overhaul which the road has just finished giving them. The work is described, and illustrated, in an article starting on page 32.

TOWARD "SOCIAL" SATISFACTION: The American free-enterprise business system has brought more people closer to material wealth than any other system has ever done anywhere else. But it has been far less successful in developing and applying "social skills"; it has largely failed to give to individual employees, to customers, to stockholders, the "sense of participation," the "human satisfaction," which nearly everyone wants. Our leading editorial, based in large part on a recent article in the Harvard Business Review, shows that business—including the railroads—can't rely solely on economic remedies to cure non-economic problems.

PRESIDENTIAL CHANGES: Not one, but two, important Class I railroads have new presidents this week. On the Chicago Great Western, it's William N. Deramus, III, who has succeeded the late Grant Stauffer. And on the Chicago & Eastern Illinois it's Clair M. Roddewig, who has succeeded John Budd, who, in turn, has gone to the Great Northern as operating vice-president. Both Mr. Deramus and Mr. Budd come from railroading families; the former, incidentally, succeeds to the distinction formerly held by the latter, of being the country's youngest president of a Class I line-haul railroad, with Mr. Roddewig a close competitor for the same honor. Mr. Deramus' career is outlined on page 39; those of Mr. Budd and Mr. Roddewig on page 41.

WHAT WILL THE DECISION BE? The Interstate Commerce Commission had a busy time last week, as it listened to six full days of final argument by carrier and shipper representatives for and against the 13 per cent freight-rate increase which the railroads are seeking in Ex Parte 168. A full account of the week's proceedings begins on page 28.

WANTED — A DEFINITE PROGRAM: The railroad industry *needs a definite program* for measures which will restore it to financial health—a program which, one of our editorials declares, will enlist the support of the industry's many friends (page 20).

BIG JOB: Flood control projects have frequently necessitated relocation of railway lines. One of the biggest such relocations, and one of the largest railway construction projects now under way in this country, is the relocation by the United States Army Engineers of a 17-mi. double-track section of the Pennsylvania's Conemaugh division in western Pennsylvania, in preparation for construction of a flood-control dam on the Conemaugh river. The $16-million project is described in detail beginning on page 22.

TIME TO MECHANIZE: With the 40-hour week for non-operating employees close at hand, the incentive for increased mechanization of railroad accounting procedures is greater than ever before. That the necessary tools are available—both in quantity and quality—was amply demonstrated by the exhibit staged last week at Atlantic City, N. J., during the railway accounting officers' 55th annual meeting, by some of the country's leading producers of office equipment. The exhibit is more fully described, and the proceedings of the convention itself are reported, in an article which begins on page 35.

overcoming an underwater problem for the Northern Pacific

▶ Spanning the St. Louis River, linking Duluth, Minn. to Superior, Wisconsin, swing bridges are operated by the Northern Pacific Railway, "Main Street of the Northwest." Heavy traffic depends upon their smooth electrical opening and closing. For these conditions the railroad wanted a submarine power cable of exceptionally long-lasting service life.

The choice was an Okonite submarine cable. The installation called for 3600 feet of 3-conductor cable. Conductors: Okoloy-coated for corrosion resistance, Semicon-taped to prevent internal corona cutting. Insulation: long-lived Okolite. Armor: Galvanized steel armor wire. O. D. of cable: 2.390". Weight: 5 lbs. per foot.

While moisture-resistance is, of course, an essential, perhaps the most important single factor in this cable's selection is the consistently stable electrical characteristics of *Okolite* high-voltage insulation.

Power cables are only one of many types of Okonite wires and cables used by American railroads. Others are specially designed for signal applications, case and instrument wiring, centralized traffic control. Write for information on specific railroad uses of wires and cables. The Okonite Company, Passaic, New Jersey.

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Economic Remedies Won't Cure Non-Economic Ills

Spokesmen for business, especially "big" business —including, of course, the railroads—who attempt to win friends for business, and for economic freedom, by pointing to the figures which reflect the effectiveness of modern business and industry in raising the general standard of living, are probably aiming at the wrong target. Just because critics of private business usually express their criticism in demands for more and more economic advantages—higher wages, more "social security," cheaper prices —does not signify that unsatisfactory pay and working conditions or high prices are the *real* source of their complaints. A group of employees may demand more money or what is known as "improved working conditions," not necessarily because the real source of their dissatisfaction lies in their earnings or conditions of labor, but because more money or "improved working conditions" is all they are organized to bargain for. Meantime, the actual origin of their dissatisfaction may lie in some such hard-to-define irritation as the feeling that they are being treated as if they were people of no importance.

"Not By Bread Alone"

Trying to locate and correct conditions, other than the economic ones, which give rise to unsatisfactory relations with labor, with customers, or with the general public is a task which many men in managerial positions regard with distaste. A search for non-economic causes of unrest smacks of "do-goodism" or paternalism, or even "parentalism," or some other behavior usually considered scarcely masculine in character. Hence it is that the real causes of irritation are seldom corrected—they are, indeed, not often even discovered; and frequently their existence is not suspected. It is written that "man does not live by bread alone." He does not live either merely by having "two chickens in the pot," a new car in the garage, and a 40-hour work week.

Management is employed by owners, not just to "run the business" efficiently. It is also hired to protect the owners' principal and, if possible, to procure a reasonable return on it—not just in one year, but for the long term. If protection of the investment and of a fair return requires that management cope with opposing forces which are psychological or social rather than economic, then management cannot consider that its duty is done when it goes no further than to secure the productive efficiency necessary to permit low prices and higher wages. Any technique—whether of psychology or sociology or even philosophy—which will serve in the preservation of the property and its earnings is as appropriate a field for management activity as is the mastery of the technology of production or the science of keeping outgo less than income.

Free business on the American pattern did not come to its present grief because of its neglect, so

far, to make everybody rich. It has, indeed, brought everybody much closer to material riches than they ever were before. The troubles of business have risen, instead, from its having concentrated so much upon material results that other things which people want, perhaps unconsciously, just as much as they want big incomes have been neglected. An employee, or the average customer, by himself, is a "little fellow," and it used to be standard practice to treat him as such—but, banded together, the little fellows aren't little any more. Coping successfully with them requires knowing more about their real motives than the demagogues do, and giving them leadership which will fill their needs better than the demagogues can.

Such considerations as these are not mere "theories" to which busy railroad men cannot afford to devote time and attention—instead they are the very aspects of the railroads' present situation where remedial action is most sorely needed; and where so little genuine progress has been made. How, for instance, can the railroads induce their employees, their security holders and those of their patrons who are wholly or mainly dependent upon railroad service to become *participants*—not mere onlookers—in the political struggle to secure a regulatory and financial framework in which the railroads can, once again, operate successfully as privately financed enterprise? There is no problem more important to the railroads' future than this—yet it lies entirely outside the realm of ordinary railroad technology and economics.

To Improve "Human" Satisfaction

How lay hold of such a nebulous challenge as this—staking it down so it can be worked on? There are some practical suggestions toward an answer in a supplement to the May issue of the Harvard Business Review—an article written by Dean Donald K. David, a successful business man in his own right, who has progressed further, perhaps, in his grasp and exposition of the essentials of business leadership than anyone else in the country. Dean David sets forth the qualities needed in a successful business leader as follows: "The first of these is competence in the management of his business activity"—progress is not going to be made in solving the psychological and sociological problems of business by men who fail to perform well their primary job of "running the business." He then goes on to say: "The second [necessary quality] is the development and application of social skill so as to make his business enterprise a 'good society.' The third is the willingness to participate in the broader affairs of the community and nation."

"I see opportunity unlimited," Dean David writes, "for improving the 'human' satisfaction which people have a right to expect from the place where they spend as much as a quarter of their lives, their place of employment. . . . One hears much these days about giving employees 'a sense of participation.' . . . The participation must be real. . . . It must come from a genuine recognition by the leader that each member of his organization has something to contribute to it and needs to be given the opportunity to do so. The business leader must believe in the dignity of the individual and in the value of each man's participation. . . . I am not speaking of just the top men in industry. . . . The responsibility for competence and the responsibility for creation of a good society fall upon every person who has a directive part, no matter how small, in the activities of the people who make up the organization."

What the dean discerns is a far cry from the old-school theory of management best described in the phrase "treat 'em rough and tell 'em nothing"—a practice which produced attractive financial results for the short run, but piled up a huge deficit of ill will toward business leadership which the present generation of management is having a hard struggle to overcome. It has the double responsibility, not only of doing its own management job well—but of being extraordinarily deserving to counteract, if possible, the handicaps bequeathed by some of its short-sighted predecessors.

There is a lot more of similarly nourishing enlightenment in Dean David's essay, which space is not available here to discuss. Railroad men whose concept of their duties is larger than that of the primary job of "running the railroad," or such part of it as is entrusted to them, will find it profitable to read the entire discussion in the original.

WANTED — A DEFINITE PROGRAM

For the guidance of people who would like to assist the railroads politically in securing more equitable competitive conditions in transportation—for instance, railroad employees, supply manufacturers and their employees, and friendly shippers—would it not be most helpful if the railroads, individually or collectively, would issue, if only "as information," a program specifying reasonable standards of weight and size limitations for highway vehicles, and similarly equitable provisions for the financing of highways, waterways and airports?

One of the leaders in the direction of the railways' public relations activities suggests, with some reason, that the railroads have no more business adopting an "official" stand on the question of proper size and weight limitation for highway vehicles

than truck operators would have in expressing themselves, for instance, on train length limitation or proper axle loading for locomotives. The cases are not quite parallel, because the railroads as taxpayers have a financial interest in the preservation of the highways which truck operators do not have in the railroads. Be that as it may, no one would question the propriety of dissemination by a railroad, or by the industry as a whole or by regions, of the weight limitation formula of some state which has worked it out scientifically.

The railroads could also find plenty of expressions from state government sources against so-called "reciprocity" and from toll-road advocates on the advantages of toll financing of long-haul highways. In short, it is possible for the railroads to make clear to railroad employees and other friends of the railroads in specific terms what is needed in the way of reasonable statutory standards for size limitation of vehicles and for the sound financing of publicly owned transportation plant from users' payments—without the necessity of committing the railroads to an "official" position on any of these questions, if taking such a position be considered undesirable or improper.

The point is that mere generalized sympathy for the inequities the railroads have to face in their competition with government-owned transportation plant does not do the railroads any good. They need to tell their friends, specifically, just what is wanted from the legislative authorities—otherwise the goodwill which exists toward the railroads cannot be converted into an effective political force for securing remedial action.

And what about freeing the railroads from some of the regulatory handicaps which prevent their meeting the rates of contract carriers by highway and water? The June issue of the magazine "Fortune" suggests that granting such freedom from regulation to the railroads is the only alternative to government ownership—and more than one chief railway executive has expressed the same opinion.

Other chief railway executives have suggested that the railroads be allowed higher depreciation rates, possibly retroactively; and that earnings invested in improvements which are not highly remunerative be exempt from income taxation. Why, indeed, would it not be justifiable to exempt all earnings reinvested in the fixed properties from income taxation—seeing how the fixed property of all other (i.e., government-owned) transportation plant not only does not contribute to taxes, but actually consumes taxes; and seeing how, further, earnings are now the only source of financing open to railroads for improvements to fixed properties?

There is no doubt whatever that a canvass by the railroads of the available legislative measures which would contribute to restoring the industry to financial soundness—and a specific statement of those most needed to secure this objective—would be most helpful in rallying the political support, failing which, probably, none of these desirable measures can be enacted.

SAVING LIVES WITH PORTABLE TELEPHONES

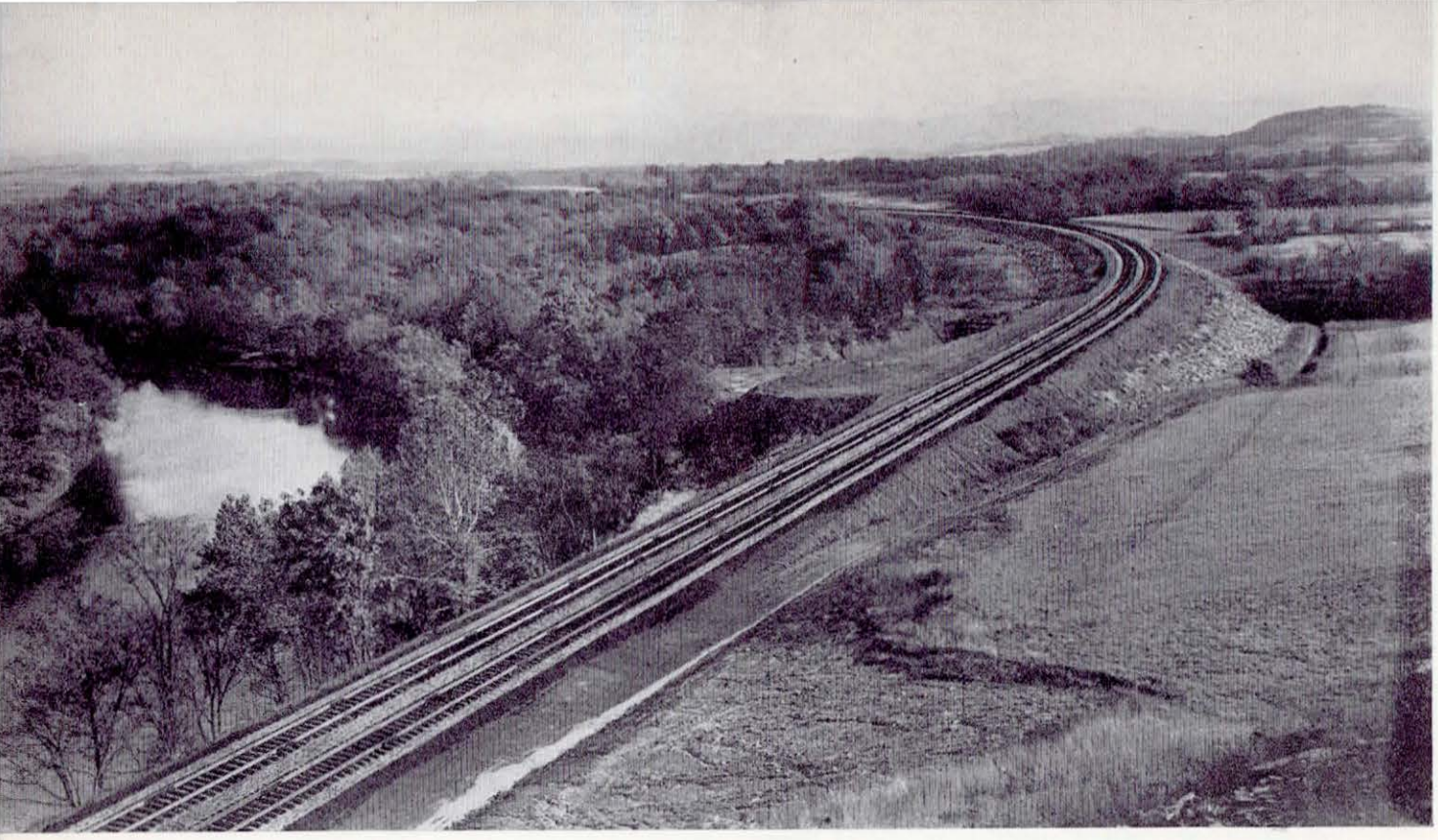
The portable telephone is proving highly useful as a tool for the maintenance-of-way and structures forces. By permitting direct communication between field forces and those who direct train movements important advantages are realized. Under some circumstances, for instance, portable phones are useful in obtaining more working time for individual gangs using on-track equipment. In others, trains can be authorized to move over tracks as soon as emergency repairs have been completed. But their greatest potential value is as a safety measure in connection with movement of track motor cars.

Many letters have been received from maintenance men—from foremen to district engineers—pointing out this safety feature. One of them sums up these comments with the statements, "If all gangs were equipped with portable phones, and in conjunction therewith made proper use of flagmen and a little common sense—accidents in which motor cars are struck by trains could be practically eliminated."

Interstate Commerce Commission reports reveal that it has investigated 18 collisions between trains and track motor cars during the past five years. These accidents resulted in the death of 39 persons and the injury of 67 others. All were held to be caused "by failure to provide adequate protection for the movement of track motor cars." In most of these accidents the motor-car operator lacked knowledge regarding imminent train movements in the block occupied by his motor car. If each had had a portable phone, with access to a line to permit its use, lives undoubtedly would have been saved.

The praise that correspondents have bestowed on portable telephones indicates that "adequate protection for the movement of motor cars" need not, in all cases, involve intricate and extensive alterations to train rules or methods of operation. Often, provision of such protection can be as simple as asking an operator the condition of the block.

Many railways have equipped their maintenance forces with portable telephones. At least one has even furnished space radios to gangs employed in a territory where there are no telephone lines. Letters received from people employd on these roads evidence their sincere appreciation of a device which eliminates hazards and affords operating advantages as well.



Major Line Relocation

One of the largest railway construction projects now under way in this country is that being carried out by the Corps of Engineers, U. S. Army, in relocating a 16.94-mi. stretch of the double-track main line of the Pennsylvania's Conemaugh division in preparation for the construction of a flood-control dam and reservoir in the Conemaugh river. The new line will replace trackage that will be inundated or otherwise rendered useless when the dam is completed. Work was started early in 1946, and at the present time the grading work, which has involved the handling of about 6,200,000 cu. yd. of material, and the construction of a 2,660-ft. tunnel, is practically complete. The track work is also well under way, as is the erection of the superstructures of six major bridges.

This relocation project is noteworthy not only because of its cost—approximately $16,000,000, much of which is represented by the heavy grading made necessary by rugged terrain—but also because of the design features of the tunnel and other structures, which differ in many respects from usual railway practices.

The Conemaugh river flood-control project was conceived shortly after the disastrous St. Patrick's Day flood of 1936, which reached unprecedented heights in the Allegheny and Ohio valleys. It is only one of several such projects in this area, designed to effect a substantial reduction in flood damage. It is estimated that the Conemaugh project alone would have reduced the flood crest at Pittsburgh in the flood of March, 1936, by 4.6 ft.

The dam involved in this project will be built near Tunnelton, Pa., approximately 40 mi. east of Pittsburgh. At full-pool stage the water in the impounded reservoir will be approximately 60 ft. over the Pennsylvania's present tracks near the dam site. The existing line will be under water for approximately five miles upstream from the dam.

The Conemaugh Division main line is of great importance to the Pennsylvania as a freight traffic route between the West and East. This line extends northeast from Pittsburgh and follows the Allegheny river upstream to Kiskiminetas Jct., 30.2 mi. It then turns to the southeast and follows the Kiskiminetas river 25.3 to Saltsburg. Beyond Saltsburg the line continues to the southeast, following the Conemaugh river for 20 mi. to Compitt Jct., where it connects with the main line of the Pennsylvania's Pittsburgh division.

This route provides a river grade throughout. The grades on the Pittsburgh division between Pittsburgh and Conpitt Jct. are less favorable and require helper service for tonnage trains. Use of the Conemaugh Division line relieves congestion on the busy Pittsburgh division — a highly important consideration — and also provides a means of by-passing through freight around the Pittsburgh terminal. The importance of the Conemaugh line is shown by the fact that it carries approximately 60 tonnage trains daily.

When the Conemaugh River project was authorized by Congress, the Pennsylvania entered into an agreement with the Corps of Engineers, in which the latter agreed to replace the present line in kind. Under these terms the new line has a maximum grade of 0.3 per cent, compensated, and a maximum curvature of 5 deg.

The Conemaugh flood-control project is outstanding

The Bow Bridge crosses the Conemaugh river about a mile below the site of the proposed dam and also crosses over the stone arch bridge of the existing line

Nears Completion

The relocation project involves six major bridges. The Social Hall bridge, shown under erection, is a deck-girder structure with eight 100-ft. 2-in. spans

Pennsylvania project, necessitated by flood-control work, involves 17 mi. of road — Part of an important freight line, the new route will go in service this year

among such dam projects in that the incidental work — of which the railroad relocation is the largest single item — will cost considerably more than the dam itself. The total cost of the work is estimated at $44,200,000, of which the dam and its appurtenances will amount to $14,700,000.

The New Route

The upstream, or east end of the relocation begins about one mile east of a bridge which carries the present line over the Conemaugh river, known as the Social Hall bridge. It then swings to the left of the present line and crosses the river on a new bridge upstream from, and at a higher level than, the existing bridge. It follows the left side of the river valley, 4.4 mi. to a ridge in a large bow in the river. Passing through the ridge in a deep rock cut, the new line immediately crosses to the right side of the river on a high bridge, well above an existing bridge on the

present line. Beyond this point the new line roughly parallels the present, but at a considerably higher elevation, for 5.6 mi. to a point about one mile east of Saltsburg, where the present and new lines again diverge. The new line bypasses Saltsburg to the north, traversing the new tunnel, and again parallels the present line about a mile west of the town, but at a higher elevation. It then follows the right bank of the Kiskiminetas river, paralleling the existing line 4.3 mi. to a point just west of Avonmore, where it crosses the river and connects with the present line.

Because the country it traverses is rugged, many heavy cuts and fills were required. The heaviest cut — that at Bow Ridge — involved nearly 830,000 cu. yd., largely of rock and indurated clay, most of which required drilling and blasting. In making this cut alone, nearly 570,000 cu. yd. were wasted. Total excavation on the project, as already mentioned, was approximately 6,200,000 cu. yd.

Both cuts and fills were finished to provide a 40-ft. width of roadway, exclusive of side ditches. This width was increased on curves and on the higher fills. A 7-ft. berm was provided between the backs of the side ditches and the toes of the walls in rock cuts as a safeguard against falling rocks.

Fills were constructed of rolled earth put down and compacted in six-inch layers, of clean dumped rock, or of a combination of materials. Where earth fills are in the area of the future reservoir, they are faced with a one-foot layer of spalls, topped with a three-foot layer of clean stone. Fills of combined materials within the reservoir limits have a core of shale, indurated clay and overburden, while the outer sections are of clean stone, dumped in 24-in. layers. Slopes vary between 1½ to 1 and 2 to 1, depending on the location and height of the fills.

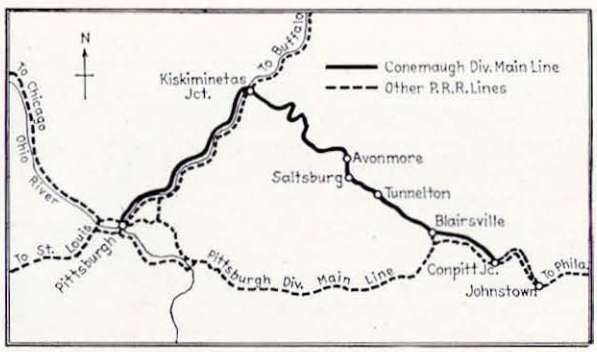
Considerable difficulty was encountered in grading because of slides. In one location a steep-pitched bed of blue clay proved troublesome and it was necessary to remove about 250,000 cu. yd. of this material, down through the line of slippage, to prevent further trouble. In another instance, where the proposed line called for a side-hill cut and fill, it was necessary to construct a concrete toe-wall 17 ft. high and 360 ft. long, to hold the embankment in place.

Inspection of the finished grade in several cuts revealed that the roadbed contained pockets of unstable material — in one instance, quicksand. Where such conditions were encountered the soft material, in some cases quite extensive, was removed and replaced with broken stone. Grading contracts were held by the Hunkin-Conkey Construction Company, Cleveland, Ohio, and Shofner, Gordon & Hinman, Los Angeles, Cal.

The new tracks are being constructed on 14-ft. centers on tangents. On curves this distance is being increased at the rate of 2 in. per degree of curve. Specifications call for a crowned subgrade, sloping ¼ in. in 12 in. toward the sides and topped with a minimum of 12 in. of cinders and 6 in. of stone ballast. The tracks are being laid with new 140-lb. rail on 24 ties per 39-ft. panel, and are fully tie plated and anchored.

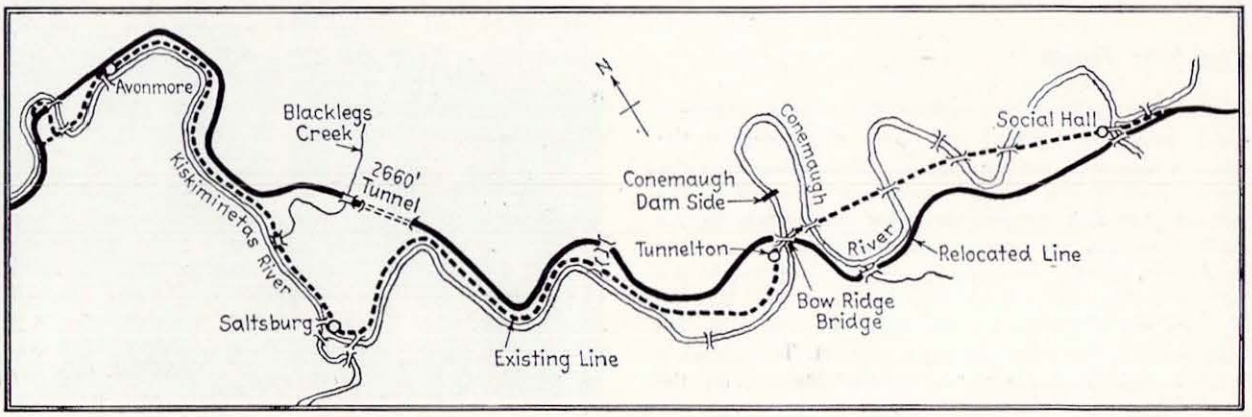
Features of New Tunnel

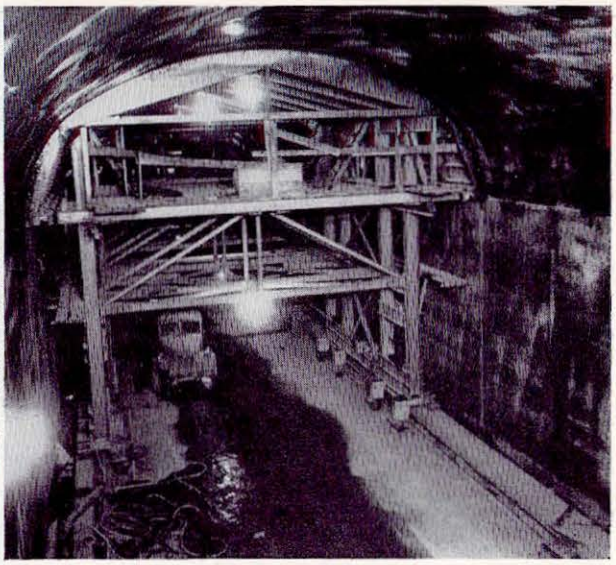
The one tunnel is located near Saltsburg and bears the name of that town. A double-track bore, 2,660 ft. long, it has a clear inside width of 30 ft. The side walls are vertical to a height of 15 ft. 1 in. above top of the rail, while the roof is a three-center arch of 8-ft. and 22-ft. radii. The clear height is 24 ft. 11⅜ in. above top of rail. The grade in the tunnel is 0.3 per cent descending westward. All tunnel concrete was air entrained.



Left—Map showing the location of the Conemaugh Division main line with respect to other important P.R.R. lines in western Pennsylvania

Below—The relocation project, showing the location of the old and new lines, the tunnel and the major bridges





Left—Heavy grading was required at many points on the new line. Bow Ridge cut, shown here, involved the handling of 830,000 cu. yd., much of which was rock. Right—Steel forms on movable travelers were used to place the tunnel lining. A pumpcrete machine was used to deliver to the forms

The tunnel floor is of concrete and embodies two slabs, 18 in.. thick, the top surfaces of which slope toward the center line at ½ in. in 12 in. Ballast-retaining curbs are provided on each side of the tunnel, and gutters, 18 in. wide, are located between the curbs and side walls. A 12-in. layer of crushed-stone ballast is laid directly on the floor slabs.

Extensive Drainage Provisions

Special measures were taken to dispose of water in wet areas in the tunnel. A typical treatment of wet seams encountered in the rock above the spring line involved the drilling of inclined holes across the seams to intercept the water, and the placing of 2-in. pipes, caulked into place in drilled holes, to catch the water and carry it to weep holes in the side walls at gutter level. Where water was encountered below the spring line, sheet-iron pans were installed to collect the flow, with pipes to carry it to the weep holes.

Before ballast was applied over the tunnel floor, half-sections of 15-in. perforated metal pipe were placed directly on the center line for the entire length of the tunnel. Water collecting in this pipe is conveyed to catch basins located at intervals of 300 ft. The same catch basins serve 10-in. cast-iron lateral drains leading from the side gutters.

The primary drainage system within the tunnel consists of a concrete-lined trench, containing a 15-in. tile drain, surrounded by gravel, located along the center line of the tunnel below the floor. The flow line of this pipe is 3 ft. 6 in. below the top of the floor slabs. Except for open joints at 15-ft. intervals, the tile pipe was laid tight. The catch basins extend down into this level, thus directing all water into the tile drain.

Refuge niches of generous size are provided at 100-ft. intervals along each side of the tunnel, being staggered so as to place them 50 ft. apart. The niches on the south side are provided with lights, above them, and four niches on this side are equipped with telephones. Eight vapor-tight conduits were placed in the south wall prior to concreting. These contain telephone, telegraph and signal wires as well as power lines for purposes of illumination and operating power track tools.

The tunnel was started in April, 1946, and is completed. Herman Holmes, of Crystal Falls, Mich., the contractor, progressed the excavation on a 24-hr. schedule. A 15-ft. by 15-ft. pilot tunnel was driven first, using a five-drill jumbo, while mucking was done by an electric mucking machine, and five-yard dump cars, the latter operating on a narrow-gage track. Drilling of the main bore was done from a large railmounted jumbo, with the mucking being performed by a 1¼-cu. yd. electric shovel.

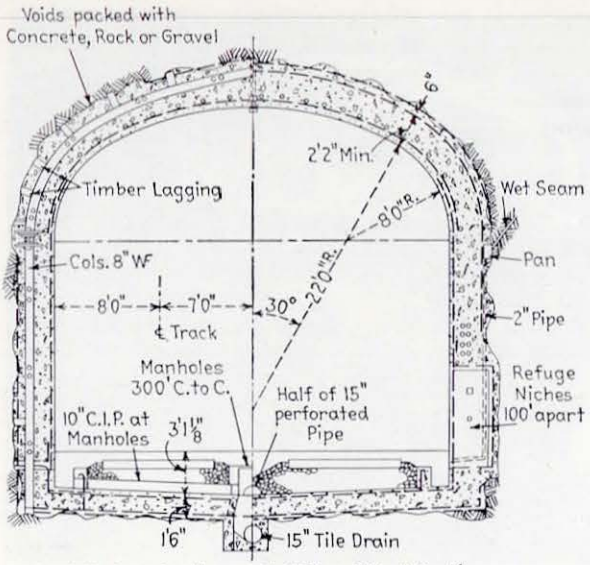
Haulage was done with three 12-cu. yd. Diesel dump trucks and an 8-cu. yd. tractor-scraper. Drilling progressed at the average rate of 20 ft. a day.

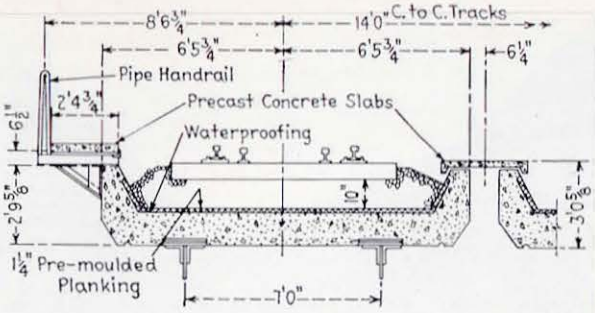
Steel supporting ribs were used throughout the tunnel, spaced from 1 ft. 8 in. to 4 ft. apart, depending on the character of the material encountered. The ribs were installed as full-section excavation progressed. Timber lagging was used back of the ribs, where required, and voids behind the lagging were filled with concrete. The remaining voids were filled by grouting after the tunnel was lined, the grout being applied through preformed holes in the lining.

Concreting Arrangements

The concrete lining of the tunnel was carried out in two operations. Blaw-Knox steel forms, 60 ft. long, were used for both the side walls and the arch, these being mounted on separate travelers. The travelers operated on tracks and provided ample clearance beneath them for the passage of equipment.

Concrete was mixed in a Rex paver and delivered to the forms by a Rex Pumpcrete machine. The con-





Above—Twin roadway slabs were used on all bridge decks

Left—Cross section of the tunnel, showing the principal dimensions and construction details in both the ribbed and non-ribbed sections

tractor made six pours per week — three 60-ft. sidewall sections, and three 60-ft. arch sections.

Special measures were taken at both portals to prevent surface water from cascading over the headwalls and wing walls. The east portal presented the most difficult problem in this respect because of the presence of a number of springs and a small stream in a narrow ravine above and at one side of the portal. This was solved by intercepting the water and diverting it into a buried 48-in. concrete pipe, which carries it across and above the line of the tunnel and discharges it into a sluiceway. The sluiceway, in turn, carries the water to a concrete-lined side channel in the approach cut.

The tunnel will be ventilated by two fans, each 9 ft. 2 in. in diameter, located at the west portal. These fans, and their operating motors, will be housed in concrete buildings on each side of the portal, just outside the tunnel. Each fan will be inclosed in a sheet-steel housing, to which is attached a sheet-steel air duct, 24 ft. long. The tunnel section is flared for the last 37 ft. at this end and a "false" lining of the regular tunnel section was placed inside the flare, leaving a continuous transverse opening in the side walls and roof at the inside end of the flare. The space above and behind the false lining provides a passage through which air from the fans will be blown into the tunnel, the passage being fed by the air ducts through openings in the headwall 9 ft. 4 in. wide by 16 ft. high.

The fans will be placed in operation on the approach of each train and it is expected that the current of air developed will move eastward through the tunnel at the rate of 16 to 18 m.p.h. This, it is calculated, will exhaust all gases from the tunnel in 3½ min.

Six major bridges were required on the project, two of which — at Social Hall and at Spruce Run creek — are in the reservoir area and required high substructures. The Bow Ridge bridge, about a mile below the dam site, is also a high-level structure, its height being dictated by the need for gaining elevation to locate the tracks above the proposed reservoir level.

The Social Hall bridge is 824 ft. long and has a maximum pier height of 95 ft. The Spruce Run bridge is 380 ft. long and is of similar height. The Social Hall bridge embodies a series of deck girder spans, while that at Spruce Run embodies three half-through girder spans and one deck-girder span. The Bow Ridge bridge is 820 ft. long, and differs from the bridges just mentioned in that it has two deck-truss center spans, each 227 ft. long, flanked by shorter deck-girder spans.

The piers of these structures are, in general, similar, and consist of slab footings, 5 ft. to 8 ft. thick, above which are monoliths of varying heights. The upper parts of the piers are identical at each bridge and consist of two rectangular columns, with concrete web members at the caps and at the mid points. The intermediate web members are omitted in the shorter piers. The abutments are of the three-column, spill-through type, with "elephant-ear" backwalls.

Other major bridges are those at Blacklegs creek, 259 ft. long; at Long run, 64 ft. long; and at the Kiskiminetas river, 461 ft. long, at the west end of the relocation. The first two of these structures are deck-girder bridges, while the last involves three through Warren truss spans. All of these structures have monolithic piers and conventional abutments. All bridge superstructure concrete was air entrained.

Deck Slabs on Bridges

All deck girders of the several girder bridges were braced in pairs, and each pair was capped with a 15-in. deck slab, with ballast-retaining curbs. The floor stringers of the truss spans were similarly braced and capped. A ¼-in. layer of waterproofing was placed over the slabs and covered with extra-hard, premolded asphalt planking. A 10-in. layer of stone ballast will be placed directly on the planking. Each roadway slab has a precast concrete walkway along its outer side, supported on steel brackets. A 12½-in. space between the roadway slabs is also covered by precast slabs.

The superstructures of five bridges, including the three high-level bridges, were fabricated and are being erected by the American Bridge Bridge Company, Pittsburgh, while the steelwork of the other structure is being handled by the Pittsburgh-Des Moines Steel Company of Pittsburgh.

All design and construction on the Conemaugh flood-

control project is being done under the direction of Col. F. H. Falkner, district engineer, Pittsburgh district, Corps of Engineers, with the field work being supervised by Wilfred Bauknight, chief of construction, and W. C. Sales. resident engineer. D. L. Somerville, chief engineer, Central region, and R. H. Crew, assistant to the chief engineer, are representing the Pennsylvania, under the general direction of J. L. Gressitt, chief engineer, system, with W. D. Suplee, assistant engineer, as chief inspector.

"IT'S EASIER TO SCRAMBLE THAN UNSCRAMBLE"

The following paragraphs are abstracted from an address by Arthur K. Atkinson, president of the Wabash, before the Downtown Optimist Club of St. Louis, Mo., at a luncheon meeting on April 29.

If nationalization comes to the United States, without doubt it will strike down the railroad industry first. It is traveling toward us now, down the tracks of government bureaucracy, and if not stopped will bring about financial conditions in the railroad industry which will make private ownership and operation impossible.

The nationalization of industry under the British Labor government was a grave step and will be difficult to retrace should the experiment prove a failure. As some wise man once said, "It is easier to scramble than to unscramble the eggs."

Is it because of some selfish motive that we [railroad spokesmen] want to keep the railroads under private ownership? If I believed that government ownership of the railroads would bring more efficient operation, lower rates for shippers and passengers, a better standard of living for railroad employees, or a stronger national security, I would be glad to become a federal servant and see our railroad lose its individual identity along with the others. . . .

Many factors combine to make this pessimistic picture, but one of the most important is the unfair competition caused by the government's policy of granting subsidies to other transport agencies. . . . The Federal Works Agency recently estimated that $60 billion of highway building is needed to bring all roads and streets up to adequate standards. The average expenditure required for an adequate highway and street program is estimated to be $4.3 billion annually, yet the total motor vehicle registration fees and fuel taxes now total only about $3.3 billion yearly. The principal cause of the high cost of maintaining highways and streets is the inability of the states to enforce the laws restricting the weight of loaded motor carriers.

According to a recent article only 7 per cent of the highway costs are paid by trucking firms, while private vehicle owners pay 93 per cent of the cost; yet trucks do 93 per cent of the damage and private drivers only 7 per cent. Pressure groups are constantly insisting that every dime spent for fuel and license taxes be appropriated for highway and street purposes only. On the other hand, the railroads not only pay the cost of construction and maintenance of their roadbeds out of their own pockets, but in addition pay substantial taxes into the general funds of all the states.

Do you realize that the federal government has already spent nearly $2 billion on our waterways to make them navigable, and that authorized projects are pending congressional approval which will cost an estimated $2 billion more? No tolls have been charged for the use of these facilities since 1882 and 80 per cent of this waterway traffic is handled by private carriers exempt from regulation. . . .

Another expensive transportation subsidy is paid to the airlines. Their terminals are said to have already cost the taxpayer $775 million to build, and an estimated $58 million each year to operate. Yet the airlines in 1944 paid only $1.5 million for rental of these facilities. The airlines pay nothing for the use of the airways but benefit by aids to air navigation and traffic control furnished free by the government. These services cost the taxpayer $63 million annually. . . . With the tremendous sums being spent by the armed services on the development of new planes and flying techniques I can see no reason for the continuation of the wasteful subsidy to the civilian air transportation.

Some of you might be thinking now of the substantial land-grants to the railroads back in the 1800's. Was this not a subsidy? Absolutely not! The facts are that the railroads did receive approximately 131 million acres of land, the estimated value of which was $123 million or 94 cents per acre. This land was of little value without transportation, and the government was in no position in those days to advance the capital necessary to build national railroads. Not only the land-grant carriers but also their competitor railroads paid the government for those lands manyfold through reduced rates on shipments of government property, mail, and military personnel. Our congress repealed the land-grant rate provisions, effective October 1, 1946, in view of the recognized fact that the railroads had already contributed, through the reduced rates to the government, more than ten times the value of those land-grants.

In spite of the experiences of the past 75 years when the railroads successfully fought off the threat of nationalization, climaxed by their proven capabilities during the recent war, why is it that this nationalization threat is still lurking on the horizon? Just what are the factors which cause the taking over by government of transportation? There have been quite a number of motives for such action in foreign countries including the following:

(1) Lack of private venture capital to build railroads necessary for the development of the country;

(2) The uneconomic guarantee by government of the securities issued by privately owned carriers;

(3) The expropriation of railroads built by foreign private investors;

(4) Government guarantee of low rates to foster sectional economic or political interest;

(5) Military expediency;

(6) Attempted regulation of several privately owned and operated roads by government ownership of one railroad;

(7) The policy of keeping rates under rigid control while permitting wages and other operating costs to rise unchecked, thus resulting in bankruptcy of the privately owned roads. . . .

For many years the railroads have been unable to show a fair return from their operations. . . . Our revenues have been held down by the strict regulation of rates, while operating expenses including wages and material costs have been constantly rising. . . . Our taxes have likewise increased by leaps and bounds. . . . A good illustration of the extent to which our states might go to keep the railroads on the tax rolls is found in a bill recently introduced in our Missouri legislature. This bill would levy a tax on the removal of railroad properties where rail service has been abandoned, measured by the tons of scrap recovered by the railroad as salvage. Railroad lines are abandoned only when such action is considered in the public interest or after a temporary purpose has been served and the line is no longer justified. Such a tax strikes me as being similar to grave robbing. It gives the tax collector one last chance after the taxpayer is dead.

Ex Parte 168 Rate Case Submitted to I. C. C.

Commission heard oral argument last week on proposed permanent increase of 13 per cent which would supplant interim advance of 5.2 per cent; more than 60 counsel participated

Oral argument on the railroads' Ex Parte 168 petition for a permanent freight-rate increase of 13 per cent was heard last week in Washington, D. C., by the Interstate Commerce Commission and a cooperating committee of state commissioners. The proposed 13 per cent advance would supplant the interim increase of 5.2 per cent which was approved by the commission in its report of December 29, 1948, and the net effect, as calculated by Jacob Aronson, chief counsel for the railroads, would be a rise of 6.5 per cent in present rates.

Mr. Aronson put the prospective annual yield from this "residual" increase at $550 million. This would be in addition to the annual-basis yield from the interim advance which was put at about $425 million in a notice issued along with the commission's interim report by I. C. C. Secretary W. P. Bartel (see *Railway Age* of January 8, page 242). The railroads will do their best to "get by" on this basis, Mr. Aronson told the commission, noting at the same time that the carriers' financial situation has become worse since the petition was filed last October and that the 40-hour week for non-operating employees will become effective September 1 to add "at least $450 million a year to operating costs."

Proposal "Extremely Conservative"

The railroad counsel was unable to say whether the carriers would succeed in their undertaking to "get by," but he insisted that their decision not to amend the application to seek further increases at this time pointed up the "extremely conservative" nature of the proposal now before the commission. And he expressed his hope that there would be prompt and favorable commission action so that the "residual" increase might be in effect "several months" in advance of the 40-hour week's effective date.

The argument sessions began on May 16 and extended over six days, the commission sitting on Saturday, May 21, in order to conclude last week. More than 60 counsel participated and their presentations indicated the general shipper opposition to the carriers' proposal. There were some, however, who said they were not arguing against giving the carriers additional revenue, but they wanted to preserve rate relationships in their industries or restore relationships which they said had been distorted by percentage increases allowed in Ex Parte 162 and Ex Parte 166 proceedings.

Thus the arguments brought before the commission such controversies as those between long-haul and short-haul shippers and those between manufacturers of competing commodities. Opponents of the increase laid particular stress on evidence in the record of the case which indicates that a substantial amount of traffic has already been diverted from the railroads to motor carriers, and that further diversions would result if the railroad rates are further increased.

Much was said also about the deficit which the railroads are incurring in their passenger-train operations, the argument there being that higher freight rates would not be required if this deficit were eliminated or substantially reduced. Arguments along this line cited figures published by the commission's Bureau of Transport Economics and Statistics in the latest issue of its "Monthly Comment." The figures showed that the net railway operating income from freight service reached a peak of $1,561.2 million in 1948, but the passenger-service deficit of $559.9 million was also a peak; and it cut last year's overall net railway operating income to $1,002 million (see *Railway Age* of May 21, page 190).

Aronson Speaks for Railroads

These opposition arguments were heard after Mr. Aronson had made his opening statement outlining the railroad proposal and summarizing briefly the evidence offered to support it. The presentation of the railroad counsel was completed at the May 21 session with his rebuttal statement which concluded the proceedings.

In his opening statement Mr. Aronson referred to wage increases in the railroad industry since 1939 and dealt with contentions that the carriers should do something about their mounting labor costs and union "featherbed" rules. He conceded that wage rates and working rules may not be just what railroad managements would like, but he said that these maters are "determined by government agencies" under provisions of the Railway Labor Act. And he insisted that the industry is entitled to recognition of the fact that present wages and rules have the "stamp of approval" of such government agencies.

On the matter of "holding the line," Mr. Aronson said that the railroads have done a "far better job"

than industry generally during the past 10 years. Freight rates, he added, have not gone up "anything like" the "110 per cent" increase in prices of materials and supplies which railroads buy. He estimated that if the proposed rate increases were in effect for a full year from September 1, when the 40-hour week for non-operating employees would also be in effect, the net railway operating income for that 12 months would be about $838 million. This means that the carriers "will have to adopt the most radical economy measures possible," he said.

Subsidy for Passenger Service?

At this point Commissioner Miller referred to the deficit from passenger operations, suggesting that a contention might be made that the government should take care of the loss in view of the fact that it gives subsidies to other modes of transportation. Mr. Aronson said he had heard no suggestion that railroad passenger operations be subsidized; and he went on to express his view that the passenger service deficit would not be as large as it is if subsidies were not given to competing passenger carriers. Commissioner Miller then said he had tried to get away from the term "subsidy," but he was raising a question as to whether the government might be disposed to absorb the deficit in order to maintain the service. Mr. Aronson made this reply: "If we can't get the cost of the service out of the users and a bountiful government wants to pay the cost, then I imagine you would find the railroads receptive."

The railroad counsel went on to say that there was in the record no testimony offering specific suggestions as to how to eliminate the passenger deficit. Because he knows of no way in which the railroads can escape their obligation to render passenger service, Mr. Aronson thinks the best way to handle the matter is to recognize that maintenance of passenger service is required by the national transportation policy, as stated by Congress, which calls for an "adequate transportation system"—not merely an "adequate freight system."

Later on, Mr. Aronson told Commissioner Mitchell that the railroads are doing all they can to reduce the deficit from passenger operations. He also said that freight and passenger operations are indivisible—they are "separate legs in the same body." During the course of another discussion of the passenger deficit, Commissioner Alldredge interpolated into the record figures indicating that revenues from 1948 passenger operations paid all the direct costs of such operations and contributed something like $100 million toward common expenses.

Meanwhile, Commissioner Mitchell had asked Mr. Aronson if all railroad executives were in accord on the application. The commissioner said he had read newspaper reports of statements by some executives who did not seem to agree that higher rates were desirable at this time. Mr. Aronson replied that the railroads with which the executives mentioned by Mr. Mitchell were associated are all parties to the application; and he added that "perhaps their actions may speak louder than their words."

Addressing himself to the evidence on diversion of traffic, Mr. Aronson said that most of it was heard from industries that have already diverted their business and thus don't use the railroads except as a "stand-by" service. He added that the poet must have been thinking of the railroads when he said "they also serve who stand and wait." The railroads "are not desirous of committing suicide," Mr. Aronson continued. He went on to say that they expect to make adjustments to meet competition; but they want an adequate revenue base to deal with those situations as they develop.

The opposition of counsel for various shipper interests who appeared after Mr. Aronson had made this opening statement was epitomized in the argument made on behalf of the National Industrial Traffic League by John S. Burchmore. When asked by Chairman Mahaffie what he would have the commission do, Mr. Burchmore said the evidence justified a finding to the effect that the additional increases proposed are not likely to increase the revenues of the railroads. The chairman then asked if Mr. Burchmore would have the commission rescind the interim increase, and the N.I.T.L. counsel replied in the negative, adding that he would "let it ride" and see what happens.

Meanwhile, Mr. Burchmore had called attention to the fact that he had labeled his brief as one "not in support of the carriers' application." He added, however, that it was "not in opposition," because the league has always taken the position that railroad revenues should pay the costs of operation and a fair return; and thus it will not oppose higher rates if the evidence shows a need for higher revenues and also that higher rates will produce them.

On that score, however, the league's position is that the evidence introduced by the railroads overstates their revenue needs. Prior to the interim increase, there was a need for additional revenues of only $528 million to keep the carriers on an "even keel" with what the commission's Ex Parte 166 report found they needed in the way of annual net railway operating income, Mr. Burchmore calculated. He went on to ask the commission to consider the "weight" of shipper opinion in the record. And he used the phrase "mob psychology" in referring to the nature of some of the opposition, suggesting that higher rates imposed on shippers in that frame of mind would make them less willing to cooperate with the railroads on other matters.

"Mob Psychology"

Commissioner Johnson asked if Mr. Burchmore had ever known "mob psychology" to think that prices were too low. And the N.I.T.L. counsel replied that he had never known of anyone who thought the prices he paid were too low. Meanwhile, Mr. Burchmore had asserted that he could find no evidence in the record that the rate structure could stand a general increase; while he found "much evidence" that rates "have reached their peak" and the railroads are "pricing themselves out of the market." In testifying to the contrary, railroad traffic officers "made their case," Mr. Burchmore conceded; but he insisted that "concern" about diversions was reflected in Mr. Aronson's statement that the carriers would attempt to "get by" without further increases.

Arguing for the National Association of Railroad and Utilities Commissioners, F. G. Hamley, its general solicitor, said that the railroads' attitude toward the diversion threat reflected an "utter blindness to the

GENERAL VIEW OF THE LONG ISLAND'S VAN WYCK EXPRESSWAY BRIDGE PROJECT at Jamaica, Long Island, where a permanent concrete bridge is being built to carry the road's 13 tracks over the 10-lane thoroughfare. There are 1,635 train movements every 24 hours through the maze of 11 crossovers and 28 switches at this point, and all these movements are being made without loss of time and with complete safety while the construction job is being accomplished

economic facts of life." Without conceding that the interim increase has resulted in just and reasonable rates, the association's position is that no further advance be authorized at this time.

Like Mr. Burchmore, Mr. Hamley asserted that the railroads had overestimated their revenue requirements. He interpreted evidence introduced by the association as indicating that "the prospective deficiency in meeting revenue requirements for the year ahead is relatively small"; and that the threats of diversion make the freight-rate-increase approach both undesirable and impracticable. "The only practicable relief is for the railroads to adopt aggressive programs to curtail expenditures, increase efficiency, and attract traffic back to the rails," Mr. Hamley advised.

He said in closing that he was arguing along the foregoing lines with "due regard" for the state commissions' "broad concepts" of their public duties. "These state commissions," Mr. Hamley explained, "believe that the public interest requires the maintenance of a sound, efficient, adequate and economical railroad transportation system. They believe that the carriers should be granted authority to make such charges that they may be enabled to serve the people well, and to receive the compensation for their services which is just and reasonable under the circumstances."

No "Right Time" to Raise Rates

The Department of Agriculture was not only opposed to any further increase, but it asked the commission to rescind the interim increase. James K. Knudson, attorney for the department, said that it was taking that position because of the "general agricultural situation." When Mr. Knudson went on to suggest that a period of "unsettled" economic conditions, which he said the country is now experiencing, is not the proper time to raise railroad rates, Commissioner Johnson asked if the department did not oppose the Ex Parte 162 and Ex Parte 166 increases on the ground that they would contribute to a "rising spiral of inflation."

Mr. Knudson admitted that the department was in opposition to the railroad proposals in those earlier cases, and Commissioner Johnson then asked when was the proper time to increase railroad rates. Mr. Knudson called that a "difficult question," and Commissioner Johnson replied that, difficult though it be, it was the question posed to the commission. The commissioner then went on to ask if Mr. Knudson thought there could be a set of conditions under which the department would favor an increase. The department's attorney replied that if the department were shown that the railroads were operated with "100 per cent efficiency" and still in need of revenues, it might not oppose rate increases as strongly as it does in the present case.

Colonel Johnson interpreted the answer as meaning "never," since, he said, "100 per cent" efficiency would never be attained. And he asked Mr. Knudson if the department's operations were "100 per cent efficient." Mr. Knudson then said that he had not meant the "100 per cent" literally, and Commissioner Johnson asked him if he were aware of improvements which the railroads had effected in the turn-around time of freight cars—"the best measure of efficiency." Mr. Knudson was not informed as to that, but he insisted that the department had done its best to prove its allegations of inefficiency, having offered as its witness C. E. Childe, described as "an eminent and respected student of transportation, a respected practitioner before this commission, and a former member of the Board of Investigation and Research." The railroads dealt with the department's presentation on operating efficiency in a rebuttal statement by Arthur H. Gass, chairman of the Car Service Division, A.A.R., who noted that Mr. Childe had "frankly" stated on the record "that he had no practical experience in railroad operation."

Another witness introduced by Mr. Knudson on this matter of operating efficiency was J. C. Winter, who is chief of the Transportation Facilities Division of the Marketing Facilities Branch of the department's Production and Marketing Administration. Mr. Winter compared actual transit times on a large number of shipments of agricultural commodities with what he calculated should be the "normal" transit times if op-

erations were as "efficient" as he thought they should be. Mr. Gass dealt with that presentation also in his rebuttal statement (see *Railway Age* of April 23, page 49).

No Expert to Colonel Johnson

When Mr. Knudson cited the Winter testimony in his argument, Commissioner Johnson broke in to say that he knew Mr. Winter "well," and "he'd be the last man I'd refer to on railroad efficiency." The colonel also said that he knew of "no greater contributor" to car delays than the Department of Agriculture with its inspection set-up administered by a staff which does not work on Saturdays. Mr. Knudson said he would bring that situation to the attention of his "principals," but the colonel said that "they know all about it."

In his rebuttal statement, Mr. Aronson said that the opposition to the railroad proposal might be classified broadly into that reflecting the "perennial" dispute between the long-haul shipper and the short-haul shipper; that based on contentions that the railroads do not need more revenue, or most of them don't; that attacking the deficits from passenger and l.c.l. operations; and that based on contentions that the traffic won't stand further increases and that the railroads should take care of their higher costs by increased efficiency in operations.

As to the dispute between the long-haul and short-haul shipper, Mr. Aronson said only that it was difficult to satisfy both sides. As to the contention that the railroads don't need more revenue, he said that the return for a "constructive year," with the proposed increase and the 40-hour week for non-operating employees both in effect, would be only 3.72 per cent on net investment. Even in the Pocahontas region, the return would be only 5.86 per cent, Mr. Aronson said, adding that if that "shocks the conscience" of the commission, then its conscience "must be very low."

In arguing against contentions that the solution to the railroads' financial problems could be found in operating economies, the carriers' counsel devoted considerable attention to Mr. Knudson's presentation and to the brief which the Department of Agriculture filed so long after the deadline for the filing of original briefs that it was received as a "reply brief." The brief was based largely on the testimony of Messrs. Childe and Winter, Mr. Aronson said; and he found that its listing of potential economies sounded like an account by Mark Twain's character, Colonel Sellers, of the "millions" to be made by selling eye wash to "50 per cent of that 50 per cent of the Chinese people who had sore eyes."

Among the department's listings, Mr. Aronson found that of a potential saving of $675 million in 1949 as a result of the use of 7,500 Diesel-electric locomotives. That estimate, he said, "scandalously" overlooked the fact that most of these locomotives were in service before this year, and the savings from their operation are already reflected in the income accounts of the carriers. "How many times do you cash the same check?" Mr. Aronson asked. "One for the book" was what he called the department's claim that the 40-hour week will not cost as much as the interested unions conceded that it would.

Commissioner Aitchison asked if there were any better way for the commission to keep informed on the efficiency of railroad operations than to study the operating averages. Mr. Aronson replied that he did not think there was, and he added that those averages have reflected "commendable performance." At the same time, he said that "nobody claims that railroad operations are a story of perfection."

Meanwhile, the railroad counsel had said that the Department of Agriculture's brief had developed, "out of no part of the record," a "new and disturbing concept" of what the rate of return should be in the railroad industry. He was referring to that statement in the brief which read as follows: "We do not believe that a regulated industry which, as the railroads did in 1948, earned a 4½ per cent return on their net investment needs further freight rate increases to enable it as a whole unit to comply with its alleged shortage factors under the transportation policy, especially in view of the declining price era into which the nation is evidently entering." Although he conceded Mr. Knudson's authority to submit the brief on behalf of the Secretary of Agriculture, it was Mr. Aronson's "guess" that the secretary had never had time to consider it—for "if he had, it wouldn't be here."

Production of connecting rods for Diesel-electric locomotives at the Schenectady plant of the American Locomotive Company was inspected by A. G. Bohorfoush (left), assistant general purchasing agent, Southern, with James T. Lewis, Alco's chief inspector, during a recent tour of the plant by A.A.R. Purchases and Stores Committee 42, of which Mr. Bohorfoush is chairman

C. B. & Q. RENOVATES "DENVER ZEPHYRS"

After 13 years and 4½ million miles of revenue service the stainless steel shows no deterioration — Insulation is renewed and other changes made in a complete overhaul

The two 12-unit "Denver Zephyr" Budd-built trains of the Chicago, Burlington & Quincy which have been in regular daily service between Chicago and Denver, Colo., since November, 1936, have accumulated 4½ million miles per train. To renew the insulation and make other necessary changes and improvements, it was decided to give the trains a complete general overhaul. This work has just been completed on the second train. Units other than sleepers were overhauled at the Aurora, Ill., shops of the Burlington and sleeping cars at the Calumet, Ill., shops of the Pullman Company.

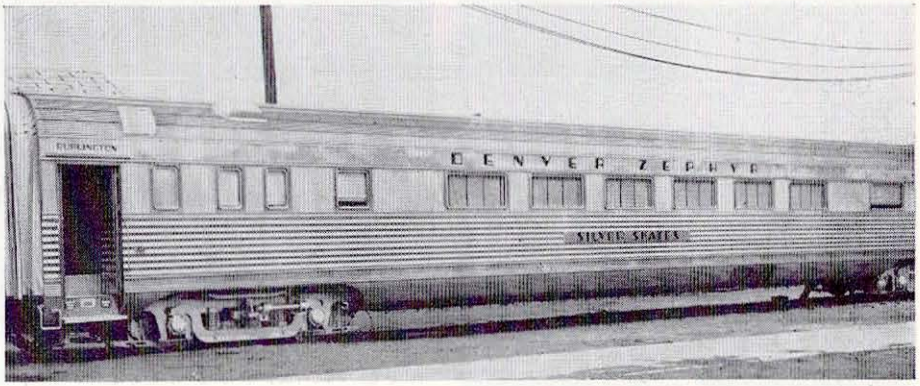
Floors Raised Slightly

With exterior sheathing, inside finish and insulation removed, the cars were stripped to the frames and an excellent opportunity afforded to inspect all parts of the stainless steel frame construction. This was found to be in an exceptionally good state of preservation after almost 13 years of service, with no evidence of corrosion either in the stainless steel frame members or Shotwelding. By contrast, carbon-steel conduit, junction boxes, occasional non-structural filler strips and low partitions were badly rusted and had to be replaced. Stainless-steel water tanks were removed, cleaned, tested and replaced in practically the same condition as when new. Two small cracks, each about 1 in. long were found in the combination baggage and auxiliary-power-car door sill, which required reinforcement for loading in excess of the original design.

Advantage was taken of complete stripping of the "Denver-Zephyr" cars to raise the floor slightly. When the cars were originally built, it was thought that the relatively high operating speed might be disquieting to some passengers, consequently the window sills were raised so that windows gave more visibility out over the landscape rather than near and down, thus minimizing the impression of speed. In actual experience, it was found that train speeds did not produce the effects anticipated and the high windows proved inconvenient. By raising the floor heater pipes and grills and other necessary changes, therefore, new floors were installed 2½ in. higher than the original, with slight ramps at each end to get from car passageways to the new level.

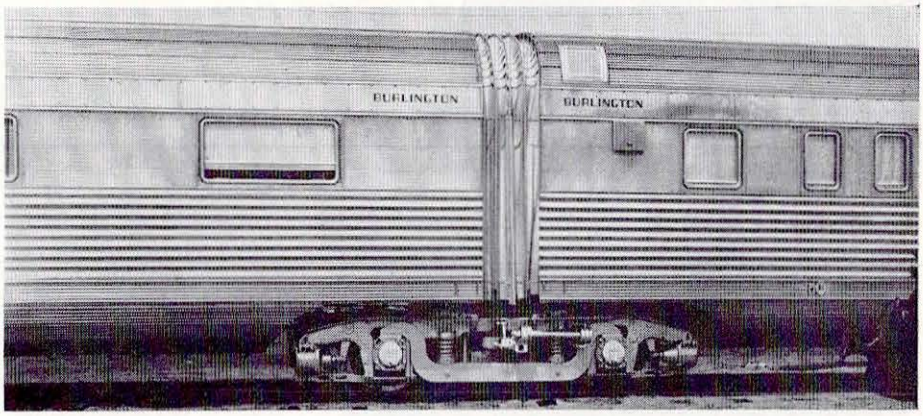
Another major job was the replacement of all conduit and electric wiring with new materials superior to those available when the cars were built. All interior metal surfaces were sprayed with a preparation both for sound deadening and to prevent the formation of moisture by condensation. New insulation of the glass type was applied throughout and carefully fitted to fill all spaces between the outside sheathing and

Facing page—The "Denver Zephyr" has been in service almost 13 years

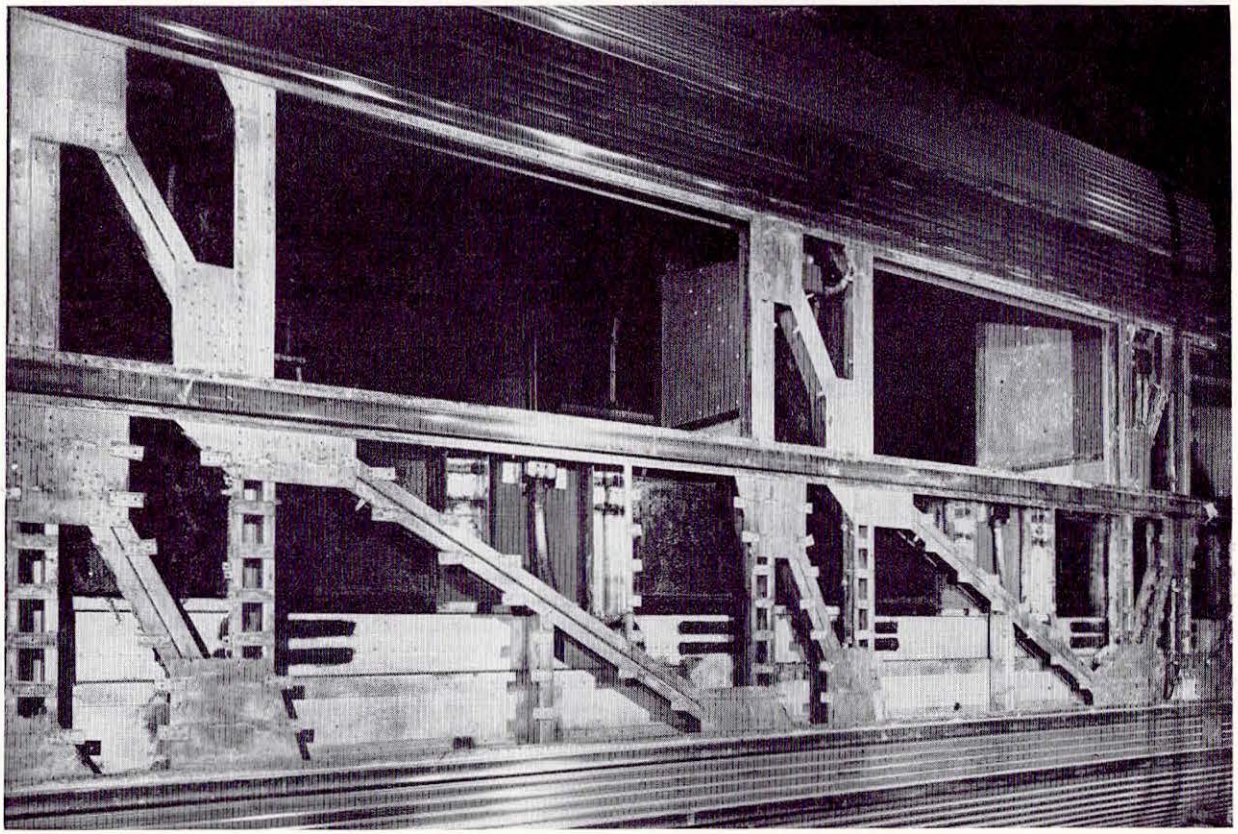


A renovated car just out of the Aurora shops

Trucks were rebuilt with coil instead of elliptic springs



Below—Center side frame section, showing absence of corrosion after 13 years service



the principal variations therefrom occurring in the reports of the general and statistics committees.

The general committee, the report of which was read by E. R. Ford, secretary, reported that it had agreed to cooperate in the appointment of a joint accounting-freight traffic-statistical committee to explore the possibility of securing the elimination by the end of 1949 of the so-called waybill studies being made by the I. C. C., or, if elimination of the studies themselves proves impossible, to obtain elimination of release of data based on short-line mileages, on the ground that such information is proving detrimental to the interests of the carriers. The same committee was to be instructed to consider the accuracy of the one per cent "sampling" process by which the waybill studies are conducted.

The general committee also reported that it had appointed a special committee, consisting of Elmer Hart, comptroller of the Pennsylvania, C. D. Peet, chief accounting and financial officer of the Missouri Pacific, and W. F. Kennedy, comptroller of the Louisville & Nashville, to consider a proposal by a member road that the I. C. C. be asked to authorize the reporting of retirement and unemployment taxes with payrolls, as part of operating expenses, rather than with other taxes.

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Glacy Succeeds Connolly as Chairman

The convention's final session, on Thursday morning, May 19, was opened with a brief address by the retiring chairman, Mr. Connolly, in which he paid sincere tribute to the officers and committees who had served with him throughout the year. "Committees," he said in part, "are the backbone of the organization. They succeed in a large way in making the operation of their particular departments more efficient and more economical for the entire industry." E. H. Bunnell, vice-president, finance, accounting, taxation and valuation, A. A. R., also spoke briefly, calling for an "aggressive attack" on problems of taxation, competition and burdensome regulatory policies.

The report of the nominating committee, submitted by J. J. Ekin, retired vice-president of the B. & O., resulted in the election for the ensuing year of G. F. Glacy, comptroller of the Boston & Maine, Boston, Mass., as chairman of the division; I. V. Jessee, comptroller of the Norfolk & Western, Roanoke, Va., as first vice-chairman, and J. W. Severs, vice-president and comptroller of the Chicago, Milwaukee, St. Paul & Pacific, Chicago, as second vice-chairman. Ottawa, Ont., was selected as the site of the 1950 convention.

In addition to the 241 members, the registration included 12 honorary members, 192 guests, and 282 ladies, a grand total of 727. Most of the guests were connected with the various firms participating in the exhibit, but included also representatives of the Army, Navy, and Marine Corps, the I. C. C., the Post Office Department, the N.A.R.U.C. and several banks and insurance companies. Presidents W. T. Faricy of the A. A. R. and J. M. Hood of the American Short Line Railroad Association were among the registered guests, as were presidents R. B. White of the B. & O., W. H. Edwards of the Lehigh & New England, and A. E. Wright of the Manufacturers Railway of St. Louis.

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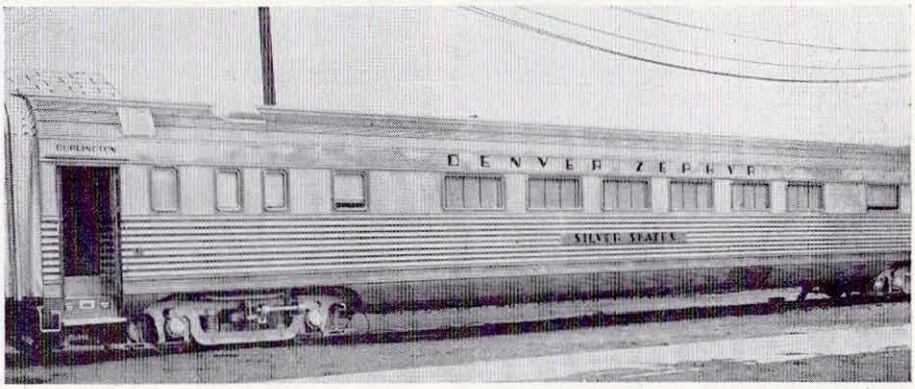
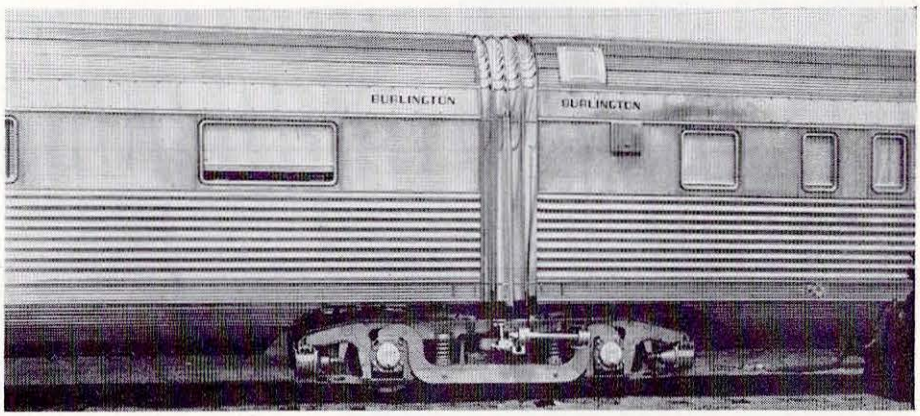
Facing page—The "Denver Zephyr" has been in service almost 13 years

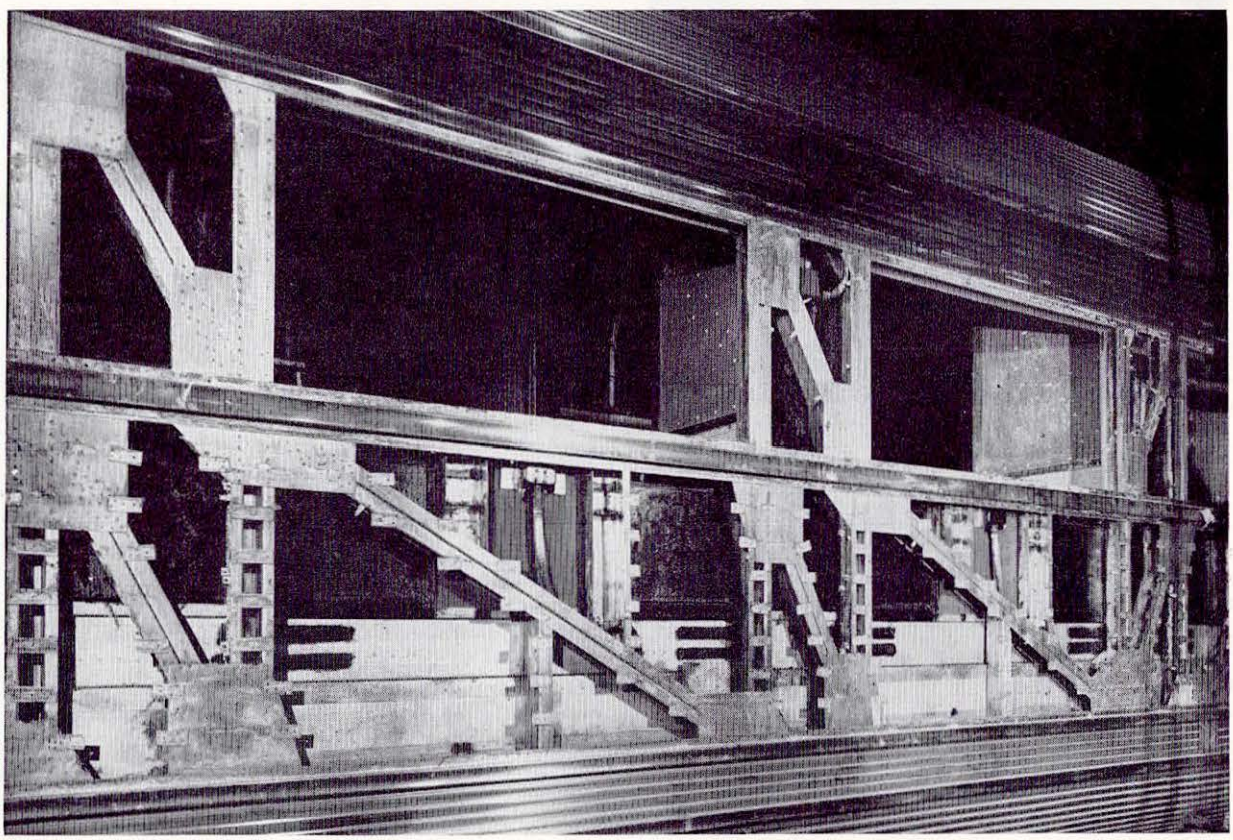


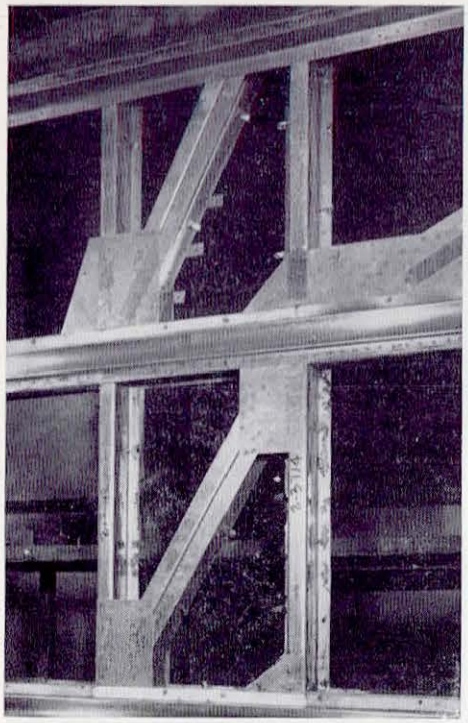
A renovated car just out of the Aurora shops

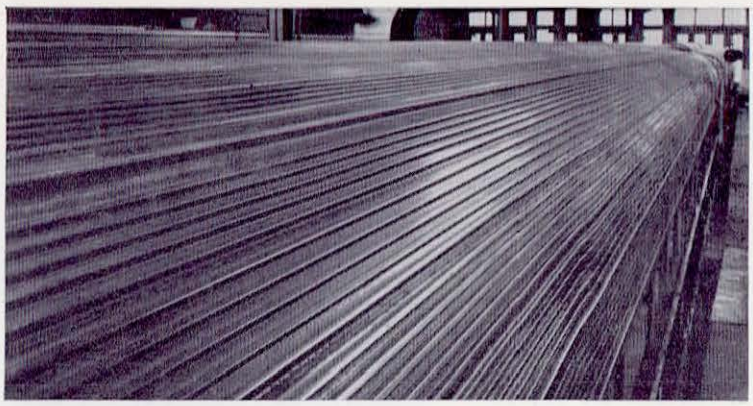
Trucks were rebuilt with coil instead of elliptic springs



Below—Center side frame section, showing absence of corrosion after 13 years service



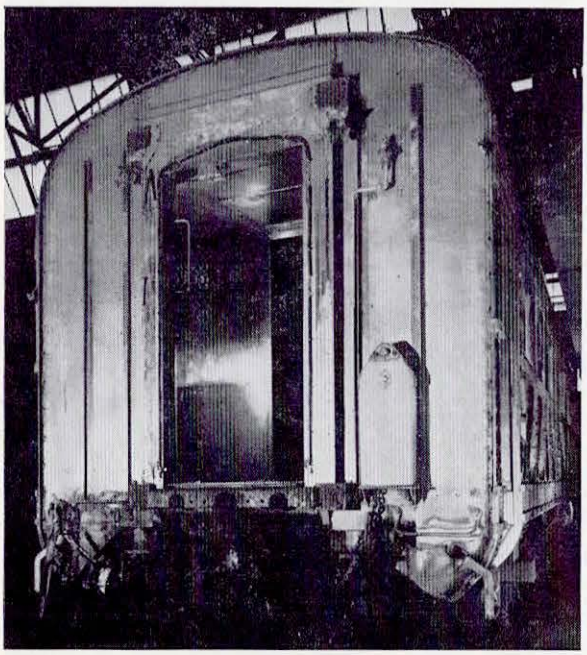




Above—The roof of one of the units after being cleaned

Left—Diagonal strength member at car center showing condition of stainless steel and Shotwelds

Below—End view of a coach with diaphragm and coupler removed



inside lining. This pliable material, which tends to spring back to its original form after compression, is expected to stay in place under the long-continued and often severe vibration encountered in railway service.

Other Major Work

The numerous coats of paint on the "Denver Zephyr" car interiors accumulated over the years all were removed, and attractive new color schemes were applied. All sponge rubber in seat cushions was replaced and all furniture was reupholstered. New carpets were installed, also new drapes, and the cars were equipped with venetian blinds.

Air-conditioning equipment, including evaporators, condensers and compressors, was thoroughly overhauled. Since head-end power is used, these cars do not have battery boxes, but all other underneath parts were carefully checked, piping was renewed, and newly insulated water tanks were put in place.

In the dining cars, the kitchens were rebuilt to permit the installation of dishwashing machines and electric coffee urns. In general, all parts of the kitchen equipment were thoroughly cleaned, repaired as necessary and reinstalled.

Coupler and Truck Repairs

Some of the units in the "Denver Zephyr" trains are articulated, while others have tight-lock coupler connections. In the latter, the rear of the coupler shank has a ball, providing a universal joint. There is a front and back casting surrounding this ball, the rear casting also acting as a follower plate, and no draft gear is used. The ball wears in service, as do the front and rear socket castings, and these worn parts were built up and remachined to their original dimensions, thus taking up all slack.

All trucks were completely dismantled, truck frames sand blasted, checked for any defects and also trammed, then built up and equipped with General Steel Castings roll stabilizers and coil springs in place of elliptic springs.

General repair work and remodeling of the two trains resulted in equipment which, from the standpoint of appearance and potential service, will prove pleasing to passengers for another term of years.

MECHANIZATION IN SPOTLIGHT at Accounting Officers' Convention

Address by W. A. Johnston, committee reports, office machinery exhibit, and short talks by manufacturers' representatives feature meeting at Atlantic City

Ways and means of using both standard and newly developed machines to make all types of railroad accounting operations faster, more efficient and less expensive held the center of attention at Atlantic City's Chalfonte-Haddon Hall as 241 railroad accounting officers, representing more than 120 railroads and railroad-affiliated organizations in the United States, Canada and Mexico, gathered there last week for the annual meeting of the Accounting Division of the Association of American Railroads.

To emphasize the increasingly important role of mechanization in railroad office procedures, the convention featured a well-attended exhibit staged by 18 leading manufacturers of office equipment, who displayed the latest products of their respective research departments—improved models of machines already in general use and entirely new devices, including some intended for mechanical performance of ticket selling and other functions not heretofore generally handled by machine. In addition, one entire session of the convention was turned over to the manufacturers' representatives for short discussions of their companies and their products.

The rest of the business sessions were largely taken up by committee meetings and by reports, with the feature address, on the Value of the Accounting Department to the Railroad Industry, being presented by Wayne A. Johnston, president of the Illinois Central.

Many Machines on Display

The exhibit, which began on May 16, in advance of the formal opening of the convention, continued until the meeting adjourned on May 19. The 18 exhibitors included the Addressograph-Multigraph Company; Alexander & Alexander, Inc.; the Burroughs Adding Machine Company; the A. B. Dick Company; Thomas A. Edison, Inc.; the Felt & Tarrant Manufacturing Co.; the Friden Calculating Machine Company; the General Register Corporation; the International Business Machines Corporation; the Marchant Calculating Machine Company; the McBee Company; the Monroe Calculating Machine Company; the National Cash Register Company; the Peirce Wire Recorder Corporation; the Recordak Corporation; Remington Rand Inc.; the Standard Register Company, and the Underwood Corporation.

Machines and equipment on display included typewriters; calculating machines; dictating machines; microfilm equipment, including readers; ticket selling machines, both agent and customer operated; bookkeeping, payroll and billing machines; card punch tabulators, sorters and printers; calculating punchers; industrial television, and visible record systems for car accounting, stores control, personnel records and other uses. Many of the individual items shown in the exhibit were described and illustrated in the *Railway Age* of May 14, pages 55-58.

Attendance at the exhibit was stimulated by furnishing each registered accounting officer with a numbered ticket bearing a blank space for the signature of a representative of each of the 18 exhibitors. A completely signed ticket entitled the holder to participate in a prize drawing held at the annual banquet on Wednesday evening, May 18.

Exhibitors Discuss Accounting Problems

The talks by exhibitors' representatives were presented on Tuesday afternoon, as the report of the special accounting committee on research. In introducing the speakers, the chairman of that committee, W. L. Price, vice-president of the Baltimore & Ohio, pointed out that clerical costs could be reduced by changes in methods and procedures, or by mechanization, and that the talks had been arranged to show what could be done in the latter direction.

The seven representatives who took advantage of the opportunity to discuss railroad accounting problems, and to point out how their respective companies are qualified to assist in the solution of those problems, were:

H. L. Summerlee, supervisor, transportation division, Burroughs Adding Machine Company, Detroit, Mich. —"In these days of high and inflexible costs, increasing downward pressure on prices, falling demand and high break-even points . . . the role of mechanized accounting in providing management with adequate information on which to base its decisions is becoming more and more obvious to everyone. . . . Management today wants its reports when they are news—not when they have become history."

Richard I. N. Weingart, chairman, board of directors, General Register Corporation, Long Island City,

The officers of the Accounting Division, A.A.R.—left to right: E. R. Ford, secretary; I. V. Jessee, comptroller, N. & W., first vice-chairman; G. F. Glacy, comptroller, B. & M., chairman; R. E. Connolly, vice-president, I. C., retiring chairman; J. W. Severs, vice-president and comptroller, C. M. St. P. & P., second vice-chairman, and E. H. Bunnell, vice-president, finance, accounting, taxation and valuation, A.A.R.

N. Y.—"We have proceeded [in the development of automatic ticket printing machines] with . . . the kind assistance of many executives from railroads. . . .We have given special attention to the incorporation of the required accounting facilities and it is in this respect that we owe our thanks for your help."

P. A. Shackleford, manager, transportation department, International Business Machines Corporation, New York.—"The opportunity for improved machine methods and systems are parallel. These opportunities divide themselves naturally into three major parts: (a) document origination; (b) document processing; (c) document completion. We think railroads have done an excellent job in document processing . . . [but have not] taken full advantage of the opportunities that exist in the document origination and document completion. . . . You have every reason to expect, during 1949 and thereafter, new and better equipment each year."

G. W. Head, research department, National Cash Register Company, Dayton, Ohio.—"The quest for still better and still more economical methods is an endless one. . . . But let us all take care that we do not become so complacent over certain achievements that we cease to look, with the same eager and open mind as before, for the improvements that can still be made. . . . It is only a question of . . . working constantly together to develop the machines that will handle your work at ever-decreasing cost. . . . Only through such coordinated effort can we accomplish what you want with maximum efficiency and in the minimum of time."

Stanley S. Kershaw, manager, special projects, Recordak Corporation, Chicago.—"The changes in working schedules that are to take effect next September 1, when non-operating employees will work a five-day week, will mean the accounting and auditing procedures will either require more help or the creation of new efficiency and more short-cuts in procedures. Greater care will have to be taken to see that the basic information necessary to complete the various transactions is true and accurate."

George T. Stufflebeam, director of research for transportation, Remington Rand Inc., New York.—"Increasing costs are narrowing the spread between revenue and expense. The Interstate Commerce Commission stresses the need for greater efficiency and reduction in costs. . . . You have taken up the challenge and are aggressively correcting outmoded procedures, inefficient and inadequate methods. . . . You have done a nice job at mechanization already, but this is only the beginning. You will do a great deal more in the years to come. Our job is to take your ideas and requirements and give you what you need to carry them out. . . . We want to work with you in the solution of your problems."

W. R. Rockhold, manager, market development, Standard Register Company, Dayton.—"Successful control combines the elements of speed, accuracy and economy. . . . A fundamental concern of railroad management is to take a searching look at important records . . . from the standpoint of how efficiently they can be prepared, and how effectively they do a job after they are prepared."

Committee Meetings

The formal opening of the convention on May 17 was preceded on May 16 by "open house" meetings of various committees for completion of reports and consideration of certain matters not included in the printed agenda. The first full business session began at 11 a. m. on Tuesday, with Chairman R. E. Connolly, vice-president of the Illinois Central, presiding, as at all subsequent sessions.

In the absence on account of illness of J. M. Symes, vice-president of the Pennsylvania, who had been scheduled to deliver the address of welcome, his prepared talk was read by J. F. Trowbridge, assistant to vice-president, P.R.R. "Insofar as the operating department is concerned," Mr. Symes' address said in part, "we are only as efficient as the accounting department permits us to be."

"The Seeing Eye"

Mr. Symes' tribute to the value of railroad accounting departments to the industry was enlarged on by President Johnson of the I. C., whose address also was delivered at the Tuesday morning meeting. Describing the accounting officers as "the seeing eye" department of the railroad, Mr. Johnson said in part:

"Your work is the eyesight of railway management. . . . As business enterprises, the railroads would be in a state of total darkness without your help and guid-

ance. . . . If your figures are faithfully given and interpreted, and if vision and understanding are coupled to your figures, then railway survival and progress are assured, all other competitive factors being equal.

"Benefits have to be recognized before they can be appreciated, however, and hence it is more than likely that we need to make the functions of the accounting department better known. . . . Specifically, I feel there is a great future for increasing the usefulness of railway accounting departments. . . . The alert executive can make accounting a major tool of management. He can show how it is just as necessary to have an adequate record of the financial results of the operation of the railroad as it is for the operating department, for example, to have schedules, signals and dispatching devices in the operation of a train.

"A president can set an example to the other departments by referring to his accounting department for verification and study the cost data and other information from outside the company on which decisions may have to be based. He may thus stress the unbiased perspective of his accounting department in matters in which it may properly be the scorekeeper.

A Source of Ideas

"A president can make his accounting department most useful by relying upon it for ideas. He can learn to expect suggestions for improvements and economies in all phases of railroad operations to come from this department . . . because the accounting department people, by reason of their keeping the record, are informed of all operations of the railroad in which there may be revenues or expenses. . . .

"Specific examples of functions in which the wide-awake accounting department can display its enterprise and usefulness are all about us in our daily work. The accounting department . . . helps to insure effective use of the analysis submitted with the current period income account . . . makes a follow-up analysis of operating costs in which unusual items of either recurring or non-recurring nature are involved . . . makes an analysis of train operating statistics to point out the relationships of unproductive train operations. Cost information is supplied for use in determining the adequacy of freight rates and passenger fares. Freight claims are analyzed. Joint studies are made for regulatory hearings and other purposes. . . . Such leadership . . . creates a better understanding among all departments and permits the management to function much more smoothly and effectively than it otherwise would.

"The alert accounting department can also be useful in helping the management to maintain and improve those manifold external friendships which we nowadays lump together under the general heading of 'public relations.' . . . The accounting department can be most helpful . . . by having all the facts and figures available to illuminate wise policy decisions, and it can spread the gospel of what the railroad is doing among all of those with whom it deals. . . .

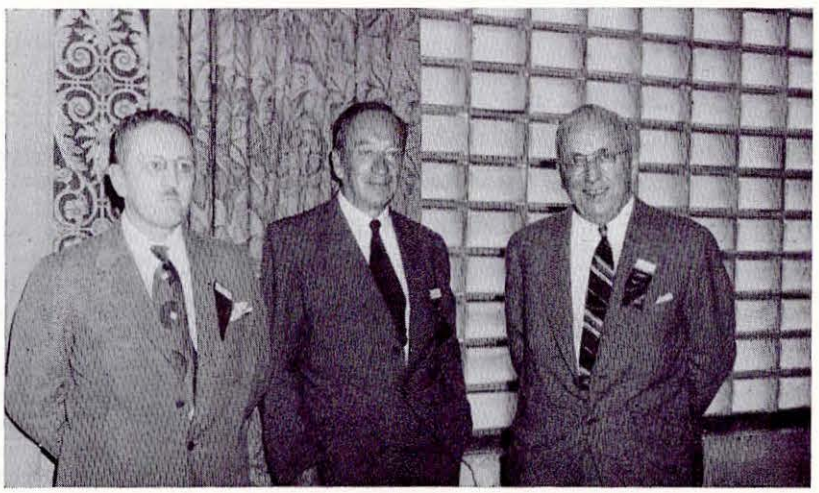
"The guidance provided by facts and figures—accurate figures, illuminating facts—that's the mission in life of the competent railway accountant. That is what sometimes makes him worth his weight in gold to the railroad."

"Tell Story of Progress"

Another speaker at the same session was R. S. Henry, vice-president, public relations, A.A.R., who asserted that the railroads must tell not only the story of their problems and difficulties, but of their achievements and their progress. "The public," Mr. Henry said, "needs more information than it has on railroad matters. The one unfailing source of such information is the railroad accounting departments."

Other guests who also spoke briefly, either on Tuesday morning or at subsequent sessions, included W. J. Kelly, traffic officer, A. A. R.; F. C. Squire, member, Railroad Retirement Board; Dr. Ford K. Edwards, director, Bureau of Accounts, Interstate Commerce Commission; A. V. Vallandingham, of the commission's Bureau of Transport Economics and Statistics; and H. B. Siddall, vice-chairman, Trans-Continental and Western Passenger Associations.

The session of Wednesday, May 18, was devoted entirely to receipt of committee reports, all of which were accepted as submitted, or received as information. Generally, these reports were submitted in the form set out in the printed agenda distributed prior to the meeting,



At the Accounting Division's convention —left to right: Dr. Ford K. Edwards, director, Bureau of Accounts, Inter-State Commerce Commission; T. H. Cooper, vice-president and comptroller, Canadian National, and W. K. Bean, comptroller, Reading. Mr. Bean was chairman of the arrangements committee for the convention

the principal variations therefrom occurring in the reports of the general and statistics committees.

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Chicago Great Western Elects Youngest U. S. Railroad President

William N. Deramus, III

L. Russell Kelce

At a directors' meeting on May 17 William N. Deramus, III, was elected president of the 1,500-mi. Chicago Great Western, with jurisdiction effective the same date. He succeeds the late Grant Stauffer, whose death on March 31 was reported in *Railway Age* of April 9. At the same meeting L. Russell Kelce, recently elected president of the Sinclair Coal Company (succeeding Mr. Stauffer) was named as chairman of the board. The former chairman of the board of the C. G. W. was Ralph M. Shaw, whose death, on May 3, following a brief illness, was reported in *Railway Age* of May 7.

President Aged 33

At 33 years of age, Mr. Deramus is believed to be the youngest Class I railroad president in the country, and the youngest man named to head a line-haul road for at least several generations. The new C. G. W. chief has devoted the entire decade of his life since his graduation from Harvard Law School in 1939 to various phases of railroading — including even his three years in the Army, when he trained an operating battalion which ultimately ran a section of the Bengal & Assam in India.

Mr. Deramus comes from a family of railroaders. His father is president and chairman of the board of the Kansas City Southern. His uncle, Louis S. Deramus, was formerly trustee and chief executive officer of the Chicago, Indianapolis & Louisville. Although educated for the bar, the new Great Western president insisted, as soon as he completed law school, on entering the railroad business, for which he has felt a yen "since I can remember." His experience as transportation apprentice on the Wabash and, later, assistant trainmaster on that road's St. Louis division, equipped him with a versatility, knowledge and skill which, he believes, will be eminently useful in the administration of a road of the size, and with the problems, of the C. G. W. His military experience in India — where, he says, he spent most of his time "trying to keep cool, without success" — gave him opportunity to develop two important skills — the handling of men under difficult conditions, and the achievement of a maximum transportation production under extremely adverse physical and administrative conditions.

Serving as assistant to the general manager of the K. C. S. from his return from military service in 1946 until he was made assistant to the president of the C.G.W. in November, 1948, Mr. Deramus was given wide latitude in undertaking special projects in improving the road's facilities and operations, and showed himself to be tireless in his investigations, exhaustive in his analysis and forceful in his presentation to management of suggested remedies. Since Mr. Stauffer became ill in December, 1948, Mr. Deramus has actually been performing the duties of president of the C. G. W.

The new chairman of the board — like its late president — is a national leader in the coal industry and heads up a combination of coal properties notable for technical and merchandising advances. He was recently made head, for example of the Rail To Water Transfer Company, which operates a large facility on the Calumet river at Chicago for the speedy transfer of coal from rail cars to lake vessels. This enterprise is owned by the Sinclair Coal Company, and its operations, while comparatively new, are growing rapidly.

Example of Management-Ownership

Owner management — which pretty well disappeared from the scene of American railroading some generations ago — is a fact on the C. G. W. Messrs. Deramus and Kelce represent a group of investors (sometimes called the Kansas City Group) who, during the past two and a half years, have purchased a substantial number of shares of common and preferred stock of the road. As is true of their large investment in the K. C. S., this group looks upon ownership in the C. G. W. as a profitable venture in the long run, and does not consider railroad management or control as a speculation. Mr. Deramus is expected to carry on the business philosophy of his predecessor which, briefly stated, is that management which has ownership in a property will work harder than otherwise to produce profits and expand the earning power and strength of its equity.

It is sometimes said that young men are expansionists; that they like to spend money more than to save it; that prudence and a passion for efficiency are the marks of older men. The C. G. W's. new president gives the lie to this observation, for he combines an insistence

upon constant improvement of the property with a degree of concern for cutting costs and attaining efficiency hard to equal.

Under his direction, the road has under way an outstanding improvement program for its fixed properties. This year some 45 mi. of 115-lb. rail will be laid, with out-of-face surfacing performed simultaneously therewith. Some 60,000 cu. yd. of chat ballast have been put under the track already this year. Present plans call for the installation of some 500,000 new ties during 1949. Concurrent with ballasting and the rail-laying jobs, cuts, fills and shoulders are being widened and the right-of-way ditched. A substantial program for lengthening sidings is being advanced as rapidly as possible. The road has erected central Diesel facilities at its nerve center, Oelwein, Iowa, which will service all Diesel power on the property.

These substantial improvements are being made within the boundries of rigorous prudence. When it completes refinancing of certain equipment obligations later this year, the Great Western will have throttled down its annual payments to a total amount well below its annual depreciation charges on rolling stock. During 1948 the policy of buying in obligations of the road was vigorously pursued. First mortgage bonds amounting to $462,000, par value, were acquired at a cost of $393,852. General income bonds, amounting to $2,373,720, par value, were reacquired at a cost of $1,594,467. The net decrease in long-term debt accomplished during 1948 amounted to $4,902,991. During the year the company also paid off the balance due on a Reconstruction Finance Corporation note for $5 million.

The operating efficiency of the road has been greatly improved without prejudice to the fast and reliable freight service it must render to hold traffic in a highly competitive territory. Gross-ton-miles per freight train-hour reached 44,036 in 1948 — an increase of 23.7 per cent over the previous year. The same figure for all roads in the United States increased only 3.7 per cent from 1947 to 1948. The ratio attained by the C. G. W. in 1948 compares with a figure of 39,905 for all U.S. Class I roads.

1948 Record Year

Gross revenues, net income and freight tonnage of the C. G. W. in 1948 were the highest in the company's history. Operating revenues increased 13.9 per cent, compared with 1947, while operating expenses increased only 6.8 per cent. Net railway operating income increased more than 50 per cent. During the first three months of 1948, while total operating revenues, compared with the same quarter of 1947, declined 1.8 per cent, net railway operating income dropped only 0.01 per cent.

William N. Deramus, III, was born at Pittsburg, Kans., on December 10, 1915. He obtained his higher education at the University of Michigan and Harvard Law School, receiving an LL.B. degree from the latter in 1939. He entered railroad service with the Wabash in 1939 as transportation apprentice, serving at St. Louis, Mo., and Decatur, Ill. He was assistant trainmaster on the St. Louis division from 1941 to 1943, at which time he entered the Military Railway Service as a captain. Subsequently he was promoted to major and headed the 726th Railway Operating Battalion. Mustered out in 1946, he became assistant to general manager of the Kansas City Southern, which post he held until he was appointed assistant to president of Chicago Great Western, at Chicago, in November, 1948.

L. Russell Kelce comes from a coal mining family. Because his father was injured in a mine accident, Mr. Kelce was forced to quit high school and go to work in the coal pits in Pittsburg, Kan., to assist in the support of his family. At the age of 19 he became a mine superintendent — youngest ever to be appointed in the Kansas fields. Discharged from the Army in 1920, he went to Oklahoma where he and other associates started a strip coal mine operation near Dawson. Mr. Kelce was then 22 years of age. He later became associated with Mr. Stauffer, and embarked on a series of joint ventures which, during the past quarter of a century, produced the Sinclair Coal Company and its subsidiaries — now the 14th largest producer of coal in the United States — with mines located in Missouri, Iowa, Oklahoma, Kentucky, Illinois and Alabama. At two of the mines — in Missouri and in Alabama, respectively, the company has operated its own short-line railroads, which have given Mr. Kelce a broad familiarity with railroad problems.

A Transportation Policy

Our present system of railroad regulation is a good deal of an anachronism. Basically, its philosophy stems back to the nineteenth century. It rests, therefore, to a very considerable degree, on the theory that the railroads are still a natural monopoly instead of a form of transportation that is compelled year after year to face increasing competition, some of it heavily subsidized by the government itself. Since the second world war alone a minor revolution has occurred in the movement of the nation's freight. Texas grapefruit, once hauled by rail, now comes North on rubber tires; cotton cloth is trucked from Southern mills to New York's garment center overnight, and fish is carried from Seattle to the East Coast in vehicles equipped for refrigeration. The number of "class one" interstate trucking enterprises has more than doubled since before the war; their total revenues have risen from $700 million in 1939 to more than $2,500 million.

To the extent that this development represents progress and evolution through competition it is, of course, to be applauded, and not decried. It is in the interest of the community as a whole to employ whatever form of transportation is most efficient and economical. But there are two other points that should be considered in this connection. The first is that we don't have a fair competition when one competitor is regulated as a monopoly and the other is not. The second is that it is imperative for our railroads to be preserved as a progressive and basic part of our transportation system.

Some will profess to see the answer to this problem in government ownership of the railroads. But that would merely be to substitute for the present policy of duplication and confusion one of deterioration and decay. What is called for is a genuine national policy which will preserve the inherent advantages of all competing forms of common carriers in a unified and coordinated transportation system. This cannot be achieved until we are prepared to set up a single transportation authority for that purpose.

—*The New York Times*

John Budd Goes to G. N.; Roddewig Heads C. & E. I.

John M. Budd

Clair M. Roddewig

On May 16 John M. Budd, president of the Chicago & Eastern Illinois, relinquished that post to become vice-president—operating department, of the Great Northern, with headquarters at St. Paul, Minn., as was noted briefly in *Railway Age* of May 21. At the same time, Clair M. Roddewig, who had been vice-president and general counsel of the C. & E. I., became president and a director of that 909-mi. road. The G. N. position assumed by Mr. Budd had been vacant since the death, on March 22, of Thomas F. Dixon.

Budd Was Youngest President

John Budd, son of Ralph Budd, president of the Burlington lines, had the distinction of being the youngest president of any Class I, line-haul railroad when he was elected head of the C. & E. I. on June 1, 1947. Now, at 41, he moves into a post of even greater responsibility on a railroad with which he had previously served for some 14 years. Despite his comparative youth, his railroading began in 1926, and his service includes a distinguished military career during World War II with the Military Railway Service. Except for the latter experience and two years as president of the C. & E. I., his entire business career has been spent in the G. N. operating department which he now heads.

Mr. Budd's associates credit him with "sparking" the C. & E. I. organization by encouraging department heads and by formulating definite programs of action. In his leadership he worked closely with his officers, keeping them well informed at all times and holding them strictly accountable for the conduct of their respective departments.

In 1948, during the middle of Mr. Budd's relatively short tenure of office with the C. & E. I., the railroad enjoyed revenues from operation which surpassed all peacetime years and were exceeded only by the war years of 1943 and 1944. Improvement in operating efficiency enabled the road, during the first quarter of 1949, to increase its net operating income by $98,000, as compared with a similar period last year. This showing was made in spite of the fact that, during the first quarter of this year, the road's gross revenues decreased by $300,000.

Continued during Mr. Budd's presidency was an aggressive long-term improvement program inaugurated several years ago which, in 1948, involved the expenditure of $5,848,321 for new equipment and improvements to existing equipment, and $964,814 for road improvements. Twenty-one 1,500-hp. Diesel-electric road locomotive units and three 1,500-hp. Diesel road switchers were placed in service last year, making 50 per cent of the road's freight and passenger train mileage Diesel-powered. By reason of this progressive and sustained modernization program, the C. & E. I. is said to be better equipped physically today to serve the traffic needs of its territory than at any time in its history.

Commenting on his stay with the C. & E. I., Mr. Budd said: "It has been my earnest desire to improve the physical property and provide the road with better tools for efficient operation. Retooling a plant such as the C. & E. I. is not a simple or an inexpensive job. We have tried to program the work of improving and adding to our equipment over a period of years."

The task of railroad management, he pointed out in a recent letter to employees and stockholders of the C. & E. I., is to create more traffic through better service, to increase the efficiency of operations and to reduce costs. "Increased efficiency," he said, "results from a more profitable output per man and machine, and the continued application of improved methods. Costs are reduced by the elimination of wasteful services and practices. Such economies are the yarn from which profits are woven."

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In 1939 Mr. Roddewig realized the need for turning his legal education and experience toward some specialized line, and decided that it should be transportation. Behind him at that time, in addition to private law practice, were tours of duty as assistant attorney general and attorney general of the state of South Dakota. His first transportation post was as district field attorney with the Interstate Commerce Commission's

sideration by its member roads had resulted in such proposals "either being withdrawn or modified in a constructive way that has prevented reductions in other directions." The 21 instances were called "only the high points," as the statement concluded with a "conservative estimate" that activities of the Traffic Department in the first four years of its existence had saved the railroads "not less than $12,000,000 or an average of not less than $3,000,000 per annum." Commissioner Rogers' ruling came after he had heard argument of counsel; and it stipulated that the material, while excluded as evidence, would be incorporated into the record as having been offered and marked for identification.

E. H. Burgess, vice-president and general counsel of the Baltimore & Ohio, made the applicants' argument for exclusion of the material. He insisted that the documents offered did not relate to any organization or procedure involved in the present case, which has "very narrow" issues, presenting only the question of whether the proposed eastern agreement will or will not further the national transportation policy. The agreement "speaks for itself," Mr. Burgess continued, adding that the application for its approval does not ask the commission to approve anything the applicants may do "through another organization or procedure."

The B. & O. vice-president went on to say that, if the documents were received, the applicants would have to consider whether they would have to meet in the present proceeding the allegations of the so-called Lincoln and Georgia cases. Those are the federal government's anti-trust complaint against the western roads and the A.A.R., which is pending in the United States District Court at Lincoln, Neb., and Georgia's anti-trust complaint against eastern and southern roads, which is pending before a special master of the United States Supreme Court.

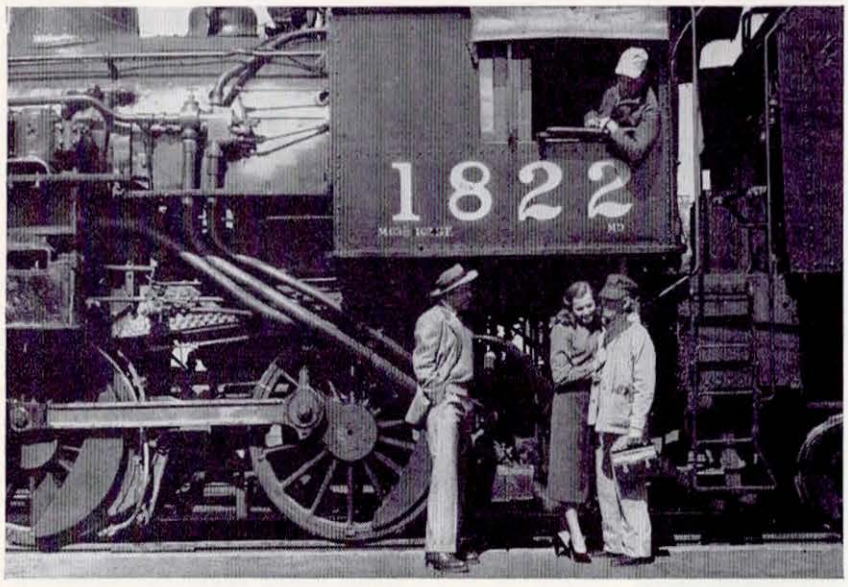
Arguments urging Commissioner Rogers to receive the documents as evidence were made by three Justice Department attorneys—James E. Kilday, special assistant to the attorney general, Samuel Karp, and Edward Dumbauld. Mr. Karp, who made the opening statement, said that the documents showed the A.A.R.'s connection with rate matters under consideration in the present case. As he interpreted the testimony at the earlier hearings, the railroad witnesses had indicated that the conference method of rate-making, as operated in the past, had not interfered with independent actions by individual roads; and that the A.A.R. had not participated in rate matters affecting Official territory.

Commissioner Rogers observed that the only question in the present case was whether the proposed agreement meets the requirements of section 5a. Mr. Karp suggested that the documents should be considered admissible for the purpose of rebutting testimony along the foregoing lines and "attacking the credibility" of the railroad witnesses. It was also Mr. Karp's contention that the commission "cannot ignore past conduct."

Mr. Dumbauld also argued that the documents should be accepted as rebuttal evidence; and he went on to contend that they were also evidence in support of the protest filed by the department against the agreement under consideration. Mr. Burgess replied that actions of predecessor organizations of those covered by the proposed agreement were "irrelevant" because the agreement stipulates that "all existing organizations and agreements" on the traffic matters involved are terminated and cancelled. Mr. Kilday spoke briefly to say that the A.A.R. plan of organization indicated that the association "will continue to take an important part in all traffic matters."

More Cross-Examination Likely

After Commissioner Rogers made his ruling, the Justice Department attorneys asked for further hearing at which to complete their cross-examination of Fred Carpi, vice-president of the Pennsylvania, who was among the several railroad executives testifying in support of the application. The hearing for that purpose was held before Examiner Burton Fuller on May 20 and 21. The Justice Department attorneys then asked for another hearing at which they plan to offer additional documents in evidence. They said that if these documents are accepted



"Special Agent," a full-length feature to be released in July by Paramount Pictures, Inc., is based on the life and property-protecting activities of railroad special agents. Directed by William C. Thomas and produced by Mr. Thomas and William H. Pine, the picture stars William Eythe and Laura Elliot. The screen story was written by Lewis R. Foster and Whitman Chambers, from material supplied by Milton Raison

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Motor Carriers Bureau, with headquarters at Minneapolis, Minn. He was so engaged, primarily in the prosecution of motor carriers for various violations, until 1942, when he joined the legal department of Office of Defense Transportation at Washington, D. C.

One of his first jobs with the O. D. T. was to handle the legal phases of the government's seizure of the strike-bound Toledo, Peoria & Western, which kept him in Peoria, Ill., for two months. He later advanced successively to assistant general counsel and general counsel of the O. D. T., supervising legal matters in connection with government seizure of transportation agencies faced with tie-ups by strikes. In 1946 he was appointed general counsel of the C. & E. I., and in June, 1948, he was elected also vice-president.

Mr. Roddewig believes that the railroads can regain some of the business loss to trucks by adjusting rates where necessary to meet competiton and by offering better and faster service. The railroads, he observes, must find ways of speeding up freight in terminals, and he points to mechanization and the elimination of wasteful practices inherent in operating agreements as steps in that direction.

Will "Tell the Story"

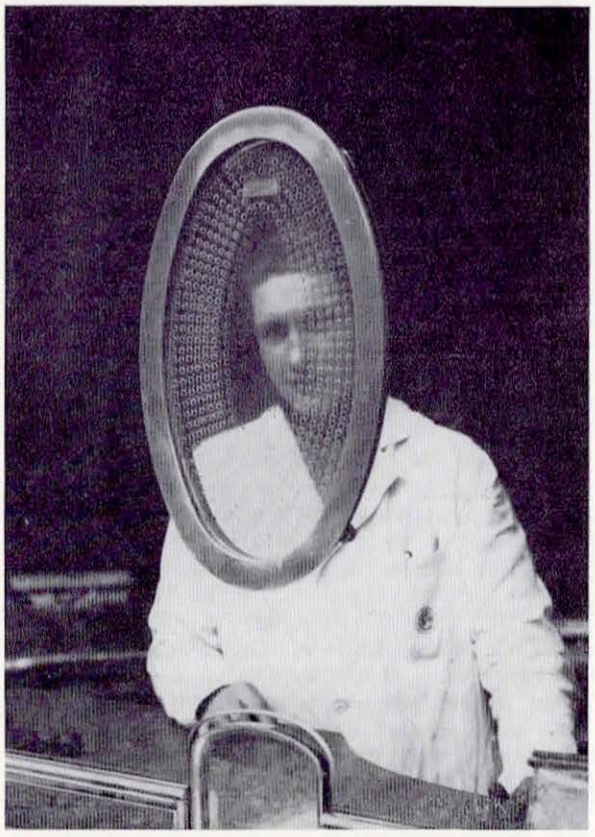
Discussing the future of the railroad passenger business, he said: "If good equipment, convenient schedules and reasonable rates do not produce a paying passenger train, then the only recourse is to take the train off." He pointed to the unfair restraint whereby railroads are not permitted to remove unprofitable trains except after long and extensive hearings, and cited the C. & E. I. "Cardinal" as an example. Discontinuance of that particular train required hearings from November 1, 1948, to April 21, 1949, during which time the railroad suffered an out-of-pocket loss of $150,000.

"Railroads cannot afford to experiment with new passenger trains because, once a train has been inaugurated, it is almost impossible to get it off," said Mr. Roddewig. "Shippers should not have to continue to support non-paying passenger trains." He revealed that the C. & E. I. plans to stimulate its local passenger business and that family and group rates to compete with the private automobile are being studied.

Mr. Roddewig said that he, along with other officers and representatives of the road, will carry the C. & E. I.'s "story" personally to the towns it serves by appearing before civic bodies at every opportunity. The "story" will include a reminder to present and potential C. & E. I. customers that the railroad furnishes them the highest type of passenger service, and that it is a vital force in community growth. The railroad will ask, in return for this service, a larger share of the freight business from these communities. It is unfair, Mr. Roddewig added, for these communities to expect the C. & E. I. to give them fine passenger service and, at the same time, have the freight of the communities hauled by a carrier which does not provide any passenger service.

Mr. Budd was born at Des Moines, Iowa, November 2, 1907. During the summers of 1926 and 1927, while attending Yale University, he worked as a chainman with engineering parties on the Cascade tunnel and Chumstick line changes on the G. N. Upon graduation from Yale in 1930, he accompanied his father on a 73-day inspection of the Russian railways, traveling over 16,000 mi. of line, as assistant to the electrical engineer. He completed postgraduate work in transportation at Yale in 1933, after which he became assistant trainmaster at Willmar, Minn., and subsequently held positions in the same capacity at Sioux City, Iowa, Wenatchee, Wash., and Spokane, until 1940, when he was promoted to superintendent at Klamath Falls, Ore. In 1942 he was appointed superintendent at Whitefish, Mont.

In November, 1942, Mr. Budd entered the U. S. Army as a major in the Military Railway Service at Fort Snelling, Minn., serving subsequently in Algeria, Italy, France and Germany, until his discharge as lieutenant colonel in 1945. On November 1 of that year he returned to the G. N. as assistant general manager, lines East, with headquarters at Williston, N. D., which position he held at the time of his election to the presidency of the C. & E. I.



HEALTHFUL WORKING CONDITIONS FOR TICKET CLERKS are said to be promoted by this French invention, known as the Hygiaphone, or "Talk Through Window," shown above in an installation at the St. Lazare station, Paris. The device is a composite partition, framed in aluminum, and consists of a transparent vibrating membrane stretched in a frame and protected by two rigid transparent plates, each punched with holes to allow sound to reach the membrane. Sound is said to be transmitted without loss of volume. The device protects the ticket clerk against diseases which may readily be transmitted through the air. It is being introduced in ths country by Felix Bardach, industrial engineer, New York

GENERAL NEWS

All Transport Should Pay Proper Costs — Faricy

That is economical way, A.A.R. head tells N. Y. Board of Trade

The equitable, low-cost, economical way to carry on the transportation business of the United States is for every form of commercial transportation to pay its proper share of the cost of publicly provided facilities which it uses, William T. Faricy, president of the Association of American Railroads, told the New York Board of Trade on May 18. Highlights from Mr. Faricy's address, in which he described railroad transportation as "a fundamental of American life and a cornerstone of the American way of living," were his statements that:

"The communities of the United States have open to them—and are united by—every means of transport yet devised by man, in greater variety and abundance than anywhere else on earth. But underlying all of this vast transportation system, and making its operations economically possible, is the American railroad. Because we have railroads to do the basic, indispensable, economical transportation of the country, we are able to have and enjoy the benefits and services of other forms of transport.

Railroads True Common Carriers

"And that isn't all. Railroads are true common carriers. They do not select their traffic from among the items which are the most profitable. They take it all, as offered. They not only carry anything for anybody, any time and anywhere, but they do it on terms which are published and known to all, and are equal to all. And they do the job with a real economy which is unmatched.

"The physical future of the rail method of moving freight in trains of cars on tracks is assured. But what of the economic future of the companies which have created these railroads, and are operating them as essential elements of the free enterprise, profit-and-loss system of doing business in this country?

"No one has come forward to haul *all* the things railroads haul at anything like the low average charges for which railroads haul them . . . Motor truck freight —including private and contact haulers as well as common carriers—has done little more in the past four years than to regain the relative position it held prior to the war. . . . There is no ground, therefore, for panicky pessimism as to the future of railroads in the fact that the inter-city highway freight hauling business has regained, and even somewhat improved, the relative position it held before the war. And there need be no serious apprehension on that score if the Interstate Commerce Commission should approve the further increases in railroad rates sought in the pending proceeding.

"On the other hand, such a step, by relating the general level of railroad rates more nearly to today's prices and costs, would give greater opportunity for making necessary and proper adjustments to meet specific situations. With the general level of rates on a more nearly adequate basis there would be increased encouragement for railroads to continue the sort of investment in better plant and equipment which makes possible lower real costs, and in turn, lower rates. That's the way things happened after the inflation of the first World War was met with a general raise in rates well above what is even suggested now. And that's the way things would happen again.

"No railroad likes to raise rates. Railroads do it only under the compulsion of extreme necessity. They try every measure of cost control which is in their power before they seek the relief of rate increases. The extent of railroad accomplishments in the direction of cost control is not generally realized, even among railroad men themselves.

"But the finest railroad plant in the world, operated by efficient railroad men, could not turn out low-cost, efficient transportation service without a sufficient volume of business. What are the prospects for volume of rail traffic? The answer to that question depends, in part, upon what the national production of the future will be. But it depends, also, upon the relative proportion of future national production which will seek movement by rail.

Public Expenditures $45 Billion

"Since the end of the first World War the idea of public investment in transportation facilities has been applied to an extent, and on a scale, never before dreamed of. In less than 30 years the total public investment in highways, in improved inland waterways, in airports and airways, has mounted into the neighborhood of $45 billion. That's all public investment. It amounts, in toto, to about three times as much as the total investment of private capital in the building of the roadway and structures of railroads during 130 years.

"There is no reason why we as Americans should not make the fullest economic use of the transportation facilities provided by the public. On the other hand, no form of commercial transportation should be permitted to overload, abuse and damage the public's investment in those facilities. And every form of commercial transportation should pay its proper share of the costs of the publicly provided facilities it uses. That would be the equitable way to carry on the transportation business of the country—and it would be the low-cost, economical way, for under such a system the traffic of the country would naturally and inevitably flow in those channels which provided the best service at the lowest real economic cost."

Department of Justice Gets Setback at I. C. C.

Documents on A.A.R. activities kept out of Bulwinkle-Act case

Documents offered by the Department of Justice in an undertaking to show that the Association of American Railroads has participated in rate-making activities of the railroads have been found inadmissible as evidence in the pending proceeding which involves the application of eastern railroads for approval by the Interstate Commerce Commission of their proposed rate-procedures agreement. The documents were excluded by Commissioner Rogers at a May 18 session of hearings on the application, the commissioner's ruling having been one which sustained railroad attorneys in their objections to the material as "irrelevant" to the issues in the proceeding.

The case is docketed as Section 5a Application No. 3, the proposed agreement having been filed under that section of the Interstate Commerce Act which was added last year by the Bulwinkle-Reed Act. The May 18 hearing, held to afford the Department of Justice an opportunity to offer the documents, followed earlier sessions at which railroad witnesses had testified in support of the proposed agreement and submitted to cross-examination by Justice Department attorneys.

The rejected material had been selected from the records of Congressional investigations and files of the A.A.R. The material from the A.A.R. files included an October 11, 1938 statement, listing 21 specific instances wherein the intervention of the association's Traffic Department in rate matters under con-

sideration by its member roads had resulted in such proposals "either being withdrawn or modified in a constructive way that has prevented reductions in other directions." The 21 instances were called "only the high points," as the statement concluded with a "conservative estimate" that activities of the Traffic Department in the first four years of its existence had saved the railroads "not less than $12,000,000 or an average of not less than $3,000,000 per annum." Commissioner Rogers' ruling came after he had heard argument of counsel; and it stipulated that the material, while excluded as evidence, would be incorporated into the record as having been offered and marked for identification.

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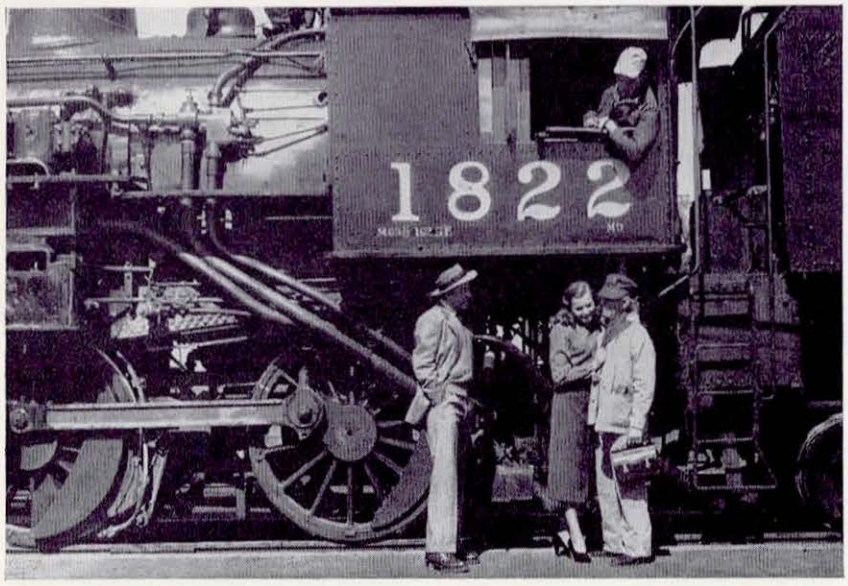
Arguments urging Commissioner Rogers to receive the documents as evidence were made by three Justice Department attorneys—James E. Kilday, special assistant to the attorney general, Samuel Karp, and Edward Dumbauld. Mr. Karp, who made the opening statement, said that the documents showed the A.A.R.'s connection with rate matters under consideration in the present case. As he interpreted the testimony at the earlier hearings, the railroad witnesses had indicated that the conference method of rate-making, as operated in the past, had not interfered with independent actions by individual roads; and that the A.A.R. had not participated in rate matters affecting Official territory.

Commissioner Rogers observed that the only question in the present case was whether the proposed agreement meets the requirements of section 5a. Mr. Karp suggested that the documents should be considered admissible for the purpose of rebutting testimony along the foregoing lines and "attacking the credibility" of the railroad witnesses. It was also Mr. Karp's contention that the commission "cannot ignore past conduct."

Mr. Dumbauld also argued that the documents should be accepted as rebuttal evidence; and he went on to contend that they were also evidence in support of the protest filed by the department against the agreement under consideration. Mr. Burgess replied that actions of predecessor organizations of those covered by the proposed agreement were "irrelevant" because the agreement stipulates that "all existing organizations and agreements" on the traffic matters involved are terminated and cancelled. Mr. Kilday spoke briefly to say that the A.A.R. plan of organization indicated that the association "will continue to take an important part in all traffic matters."

More Cross-Examination Likely

After Commissioner Rogers made his ruling, the Justice Department attorneys asked for further hearing at which to complete their cross-examination of Fred Carpi, vice-president of the Pennsylvania, who was among the several railroad executives testifying in support of the application. The hearing for that purpose was held before Examiner Burton Fuller on May 20 and 21. The Justice Department attorneys then asked for another hearing at which they plan to offer additional documents in evidence. They said that if these documents are accepted



"Special Agent," a full-length feature to be released in July by Paramount Pictures, Inc., is based on the life and property-protecting activities of railroad special agents. Directed by William C. Thomas and produced by Mr. Thomas and William H. Pine, the picture stars William Eythe and Laura Elliot. The screen story was written by Lewis R. Foster and Whitman Chambers, from material supplied by Milton Raison

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House Committee Airs "Radio-Safety" Bill

Would give I.C.C. power to prescribe operating rules

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The subcommittee which held the hearings is headed by Representative Beckworth, Democrat of Texas, who opened the sessions by inserting into the record letters from Interstate Commerce Commissioner Splawn, who is chairman of the commission's legislative committee, and from Chairman Wayne Coy, of the Federal Communications Commission. Both supported the bill, but Mr. Coy suggested an amendment so that the authority of F.C.C. would not be diminished over radio and radio frequencies matters and inspection of equipment in accordance with the Communications Act of 1934.

The legislation was also supported by Representative Price, Democrat of Illinois, who introduced a similar bill, H.R. 530, and by railway labor representatives. It was opposed by representatives of the Association of American Railroads, and J. J. Brinkworth, vice-president, New York Central. A statement supporting the legislation was filed by the Railway Labor Executives' Association while an opposing statement was filed by J. M. Hood, president, American Short Line Railroad Association.

Generally, the statements of the labor leaders laid most stress on accidents in which track motor cars were involved and contended that such cars should be operated under train orders. T. C. Carroll, president, Brotherhood of Maintenance of Way Employees, said that there was a need for federal legislation of the kind proposed in the bill. Calling the operation of railroads a "hazardous" undertaking, he said that enactment of the bill would make a "substantial" contribution toward the reduction in the number of passengers and employees killed and injured. Mr. Carroll gave particular attention to what he called the "unsafe" conditions under which track motor cars were operated. Under present operating practices, he said, track motor cars do not run on train orders and they are insulated so as not to actuate block signal systems.

Jesse Clark, president, Brotherhood of Railroad Signalmen of America, referred to collisions involving track motor cars and cited an editorial from the January 18, 1947, issue of *Railway Age* entitled "Too Many Collisions With Track Motor Cars." He stated his organization holds that the I.C.C. should be vested with the authority to order carriers to establish and observe operating rules to promote safety, which the railroads have "failed" to do with respect to the operation of track motor cars.

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The presentations of other labor leaders were along the same line. John F. Young, vice-president, Order of Railroad Telegraphers, outlined the safety legislation since the passage of the Safety Appliance Act in 1893. He called the coverage of communications as the next logical step in the field of safety regulation.

W. D. Johnson, vice-president and national legislative representative, Order of Railway Conductors, said that present day high speeds, the length of trains and certain operating changes call for every "precaution" possible to increase the safety of employees and the public. Present operating rules are adequate under some conditions but they "do not go far enough" to insure safety, he added. In his opinion, the additional authority proposed for the I.C.C. "would be in keeping" with the jurisdiction already granted the commission with respect to hours of service, safety appliances, boiler and signal inspection.

Harry See, national legislative representative, Brotherhood of Railroad Trainmen, said his organization was greatly concerned with the "inadequate" side and overhead clearances and distances between parallel tracks. He went on to discuss accidents caused by "coming in contact with fixed structures." "There is no federal regulation governing clearances," he said, "and it is still entirely within the police powers of the various states to make such regulations." Concluding that there is a need for such regulation because of the continuing increase in size of equipment, he urged the passage of the bill and the "adoption" of a standard clearance order on all railroads.

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The contest was open to any person interested in the railroad industry, and under 35 years of age. The subjects were restricted to railroading and its constructive aspects. Essays covering nearly every aspect of railroad operation were submitted by 153 contestants in the United States and Canada. The committee in charge has recommended that the contest be conducted again in the 1949-1950 season, "because it enhances the prestige of the New York Railroad Club and represents constructive effort upon the part of the industry."

miniature streamliner will offer free rides to youngsters on 750 ft. of track circling the U. P.'s "Big Boy," world's largest steam locomotive.

The Chesapeake & Ohio will operate a restaurant, "The Chessie Club," in a twin-unit diner and a tavern-lounge car at the fair. The diner, which seats 52 persons, is decorated in dark oak veneer paneling with ivory ceilings. In the tavern-lounge car the decorative feature is a large cylindrical goldfish bowl. Diners awaiting seating will be served soft drinks. Adjacent to "The Chessie Club" on the exhibition tracks will be the C. & O.'s "500" steam turbine-electric locomotive.

R. B. A. Advocates Repeal Of Transportation Taxes

"The excise taxes upon amounts paid for transportation of persons and property should be repealed *now* in the public interest," the Railway Business Association declares in a four-page pamphlet, sized to fit into regular business envelopes and just issued by P. Harvey Middleton, R. B. A. president.

The pamphlet, entitled Why Transportation Taxes Should be Repealed *Now*, says in part: "At a time when there is a surplus of seats on all common carrier equipment, travelers must pay a federal transportation tax of 15 per cent, in addition to the price of the ticket—a war tax originally designed, in part, to discourage civilian travel.

"At a time when every effort is being made by private enterprise to keep prices down, shippers using common carrier transportation must pay a federal transportation tax of 3 per cent. . . . That tax is included in every movement of the goods—on the transport of the raw material to the factory or to the mill; from the plant to the distributor or retailer—thus pyramiding prices.

"Repeal of the transportation tax would constitute a 15 per cent reduction in fares for the traveling public. That would be a powerful aid in the development of new and additional business for the transportation industry—business which is sorely needed if that industry is to serve the public adequately and efficiently.

"The tax on the travel of officers and employees of a business concern directly increases the transportation costs of that business. These increased costs are, in turn, reflected in prices which that business must charge for its products. . .

"Only common carrier transportation is subject to this tax. . . . The 15 per cent tax on travel by common carriers and the 3 per cent tax on shipments by common carriers are therefore artificial incentives to the expansion of private carriage, to the substantial disadvantage of the railroads and other 'for-hire' carriers.

"When freight traffic is diverted from common carriers to private carriers, the railroads or the commercial carriers on the highways and airways are not only deprived of the earnings from the lost traffic, but they must also spread their costs of doing business over a reduced volume. Any higher costs thus resulting must eventually be reflected in the rates charged for the remaining traffic."

Copies of the pamphlet may be obtained, free of charge, by writing to Mr. Middleton at 38 South Dearborn street, Chicago.

Freight Car Loadings

Loadings of revenue freight in the week ended May 21 totaled 773,911 cars, the Association of American Railroads announced on May 26. This was an increase of 2,175 cars, or 0.3 per cent, above the preceding week, a decline of 105,266 cars, or 12.0 per cent, under the corresponding week last year, and a drop of 116,694 cars, or 13.1 per cent, under the equivalent 1947 week.

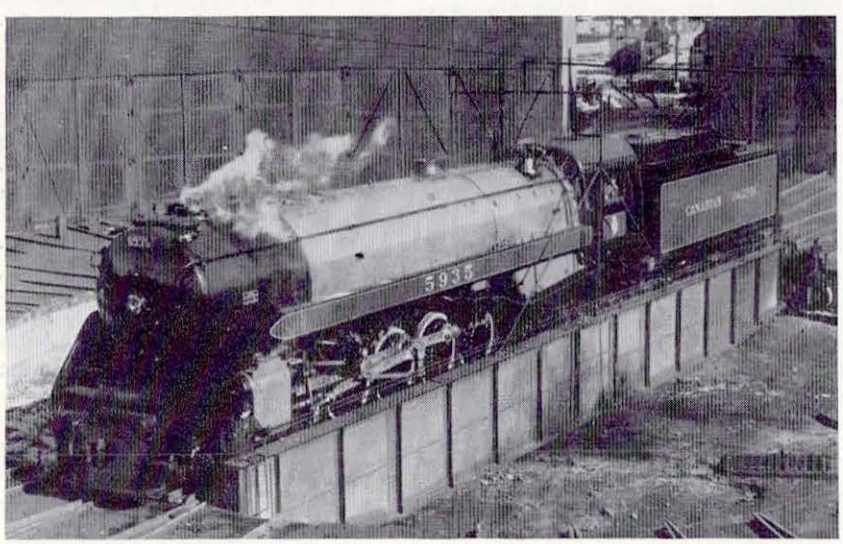
Loadings of revenue freight for the week ended May 14 totaled 771,736 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, May 14

District	1949	1948	1947
Eastern	137,936	152,480	162,591
Allegheny	163,365	180,534	189,716
Pocahontas	64,483	71,598	73,951
Southern	118,259	137,781	139,014
Northwestern	117,437	121,716	131,377
Central Western	113,337	119,887	125,539
Southwestern	56,919	62,949	66,020
Total Western Districts	287,693	304,552	322,936
Total All Roads	771,736	846,945	888,208
Commodities:			
Grain and grain products	46,276	38,057	42,286
Livestock	9,173	9,250	13,225
Coal	157,404	194,750	189,419
Coke	13,242	14,985	14,288
Forest products	39,876	42,994	48,356
Ore	74,115	72,157	72,597
Merchandise l.c.l.	93,715	107,650	121,042
Miscellaneous	337,935	367,102	386,995
May 14	771,736	846,945	888,208
May 7	768,337	880,287	884,242
April 30	785,444	891,115	882,574
April 23	769,336	851,926	893,712
April 16	765,890	784,611	865,844
Cumulative total 19 weeks	13,573,791	14,763,430	15,717,883

In Canada.—Carloadings for the week ended May 14 totaled 74,104 cars, compared with 74,354 cars for the previous week, and 77,458 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
May 14, 1949	74,104	30,870
May 15, 1948	77,458	33,876
Cumulative totals for Canada:		
May 14, 1949	1,377,365	604,101
May 15, 1948	1,404,208	686,705



THE LAST OF THE "SELKIRKS."—No. 5935, the 36th oil-burning steam locomotive of the "Selkirk" type, recently accepted by the Canadian Pacific for service through the Rocky Mountains between Calgary, Alta., and Revelstoke, B. C., may be the last steam locomotive acquired by the C. P. R., with Diesels expected to meet the road's future motive power requirements

Freight Traffic Group Leases New Quarters

After more than 37 years in its present location, the Central Territory Railroads Freight Traffic Committee, formerly the Central Freight Association, has leased larger office quarters in the State-Madison building, Chicago. Occupation of the new quarters will permit the organization to consolidate departments now operating in five separate offices.

Bureau of Explosives Issues 1948 Annual Report

Last year was the 27th consecutive year in which no explosions occurred in connection with the railroad transportation of Class A commercial explosives, according to the annual report for 1948 of the Bureau of Explosives of the Association of American Railroads. The total reported property loss caused by the transportation of explosives of all kinds was $9,834, of which $8,000 was charged

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section 25 of the Interstate Commerce Act. First, he said, it would add "telegraph, telephone, radio, inductive, or other wayside and/or train-communication systems" to the list of devices which the commission is authorized to require a railroad to install on all or any part of its line. Second, it would import into this section of the Act an entirely new subject matter by giving the commission authority to "order any carrier . . . to establish rules, regulations, and practices with respect to operation of trains intended to promote safety of railroad operation, upon the whole or any part of its railroad." This latter provision, he said, would extend governmental regulation of the railroads into a wholly new field which has heretofore been recognized as lying "wholly outside" the proper sphere of regulation. The formulation of satisfactory railroad operating rules and practices, he added, is a matter which by its very nature cannot be dealt with effectively through the administrative process. Mr. Souby also said that the "broad generality" of the bill's wording would lead to "utter uncertainty" as to its real purpose and effect; and that alone is sufficient to brand it as "improper legislation." Contending next that there was an "utter lack of necessity" for the legislation, Mr. Souby referred to the constant attention the railroads are giving to the matter of safety of their operations and the continuous efforts made by them to improve their operating rules in that respect. "Accidents are costly to a railroad, both in terms of money and in terms of prestige," he added. For that reason, he continued, "each road has the strongest possible incentive to avoid them wherever possible."

Still in "Experimental Stage"

Discussing the provision relating to communication systems, Mr. Souby said that radio communication for train purposes is still in the "experimental stage," and that the government has "no right" to require the railroads to spend their money in "mere experimentation." "The situation," he said, "is one which calls for a process of gradual, natural development and not for precipitate treatment." Thus, he added, the "time has not yet come for legislation of this sort." Here he referred to the records of the F.C.C. to bear out his point that railroads have developed the use of radio for a long time and that the Chicago, Burlington & Quincy began experimenting with radio as early as 1915.

Mr. Souby also referred to the F.C.C.'s recent order taking away from the Railroad Radio Service 19 of the 60 frequencies originally allocated to it (see *Railway Age* of May 7, page 59). If there is any need for legislation at all on the subject at this stage, it is for legislation directed toward giving the railroads assurance of being able to obtain the requisite frequency assignments when needed, he added.

Mr. Brinkworth dealt with the feature of the bill which relates to rules, regulations and practices with respect to the operation of trains. He said that in July, 1889, the first edition of the Standard Code of Operating Rules, which has been amended and revised from time to time, was adopted by Standard Time Convention, an organization representing the principal railroads of the country. It lays down, he said, the basic principles which are generally followed by all railroads. He went on to explain how on the N.Y.C. operating rules are made and that most railroads follow the same procedure. "I strongly feel," he added, "that the responsibility for establishing and maintaining their own operating rules should not be taken from the railroads and placed in the hands of a government agency." "It is impossible to conceive of any government agency," he continued, "which would be adequately equipped to prescribe the detailed operating rules and practices to be observed on each mile of railroad in the United States." Referring to the track motor cars, Mr. Brinkworth said, "Like the tools they carry to and from the work, these track motor cars are merely a part of the equipment of the various gangs mentioned and are the responsibility of the foreman just as much as other appliances of which he has charge." Thus, he added, "to operate them as trains, manned by regular train and engine crews, would be inexcusably wasteful." Concluding that the bill would "bring about" uneconomical and inefficient operation, he said, "we are also convinced that it would not promote safety but would have the opposite effect."

Graham E. Getty, statistician, Bureau of Railway Economics, A.A.R., presented statistics to show (1) that during the past quarter of a century the railroads have made marked and substantial improvement in the safety of their operations; (2) that current accident and casualty trends are sharply downward; (3) that the kinds of accidents with which this bill is concerned represent only a small percentage of the total accidents from all causes; and (4) that the railroads spent in 1948 $1,273,000,000 for capital improvements which will have beneficial effects on the safety of employees and travelers.

J. Carter Fort, vice president, A.A.R., said that the bill was supposed to be a "safety" bill, but he did not think so. It is "uncertain" because the language is "so vast," he said, and it is composed of "so many polite words" to cover such a "broad field." The railroad industry now is subject to most "comprehensive" regulation, but, he added, "we are not frightened by these regulations." Heretofore, he said, in the field of actual physical operation, it has been recognized that the discretion of railroad management must control; otherwise, he added, any hope of efficient operation must necessarily be given up. No invasion into that field up to now has been made, he continued, but this bill is apparently "intended" to mean the I.C.C. can "take over" the physical operation of the railroads.

The statement filed by President Hood of the Short Line Association said that there is no possibility of a regulatory body acquainting itself in sufficient detail with the practices necessary for economical and safe operation of that association's member roads. Those roads, he explained, vary in length from one to 2,500 miles, in numbers of crews employed from one to several hundred, and in density of traffic accordingly.

Meanwhile, a subcommittee of the Senate committee on interstate and foreign commerce held hearings May 19 on a similar bill, S.238, which was introduced in the Senate by that committee's chairman—Senator Johnson, Democrat of Colorado. Senator Johnson presided at the hearing as chairman of the subcommittee; and he adjourned it until "some future date" after receiving from the labor leaders presentations like those they made before the House subcommittee, as reported above.

Agree on Procedures For Adjustment Board

Labor-management pacts expected to clear back cases

Representatives of railroad management and executives of five unions representing operating employees have signed two agreements which the National Mediation Board hailed as pacts under which it is "confidently expected" that the "tremendous backlog" of grievance cases now pending before the First Division of the National Railroad Adjustment Board "will be dissipated." The N.M.B. expressed this expectation in a May 20 statement announcing that the agreements, which it called "far reaching," had been signed in Chicago on that day.

One of the agreements provides for the creation of two boards to supplement the Adjustment Board's First Division, and the other provides for changes in that division's procedures. Labor-leader signatories to the latter were Alvanley Johnston, grand chief engineer, Brotherhood of Locomotive Engineers; D. B. Robertson, president, Brotherhood of Locomotive Firemen & Enginemen; H. W. Fraser, president, Order of Railway Conductors; A. F. Whitney, president, Brotherhood of Railroad Trainmen; and A. J. Glover, president, Switchmen's Union of North America. All of these except Mr. Whitney also signed the other agreement, which was signed on behalf of the B. of R. T. by that brotherhood's assistant president, D. M. MacKenzie. Management representatives who signed both agreements were the chairmen of eastern, western, and southeastern committees for the National Railroad Adjustment Board

—H. A. Enochs, D. P. Loomis, and C. A. Mackay. Chairman Francis A. O'Neill, Jr., of N.M.B. participated in the closing sessions of the conferences which led to the signing of the agreements, and he also signed them as "witness."

The two supplemental boards for which the first agreement provides will be set up under section 3, first (w), of the Railway Labor Act with authority to handle cases which may be assigned to them by the Adjustment Board's First Division. The new boards will consist of four members each—two appointed by the unions and two by the carriers. The labor members of one board will be representatives of the B. of L.E. and B. of L.F.&E., while those on the other board will be representatives of the O.R.C. and the B. of R.T. "It is understood," the memorandum of agreement continued, "that the members of such boards may be changed from time to time. Representatives from any railroad involved in cases assigned to such boards may be appointed as board members to handle cases coming from that railroad and members may be changed from time to time as the cases involve different railroads."

The new boards will be established for a period of one year, and will continue thereafter subject to termination by the labor leaders or management representatives upon 90 days' notice. Other provisions of this agreement include the following:

Initially, in assigning cases to such supplemental boards, the First Division shall assign cases which have not been certified for appointment of a referee involving any railroad system where 10 or more cases are on the docket as of the date of the appointment of such supplemental boards, involving employees represented by either or both of the organizations on each board respectively. Example: If the 'A' railroad has seven cases involving the B. of L.E. and four cases involving the B. of L.F. & E. they will be assigned to the supplemental board on which representatives of those two organizations serve. The same example is applicable to the O.R.C. and B. of R.T.

Thereafter, from time to time the First Division shall assign to such supplemental boards cases involving a railroad system whenever 10 or more cases are docketed, in the same manner as prescribed in the preceding paragraph.

Cases where the interest of an organization not represented on such supplemental board is asserted, by either party or by a member of the First Division, shall be retained by the First Division and shall not be assigned to such supplemental board.

The agreement providing for changes in the First Division's procedures sets out recommendations of the labor leaders and carrier representatives that the carriers and their employees should endeavor to submit cases to the First Division "by a joint submission"; and that the division's rules with respect to ex-parte submissions be changed to adopt the following procedure:

The party or parties making the submission shall, at the time of filing the submission with the division, furnish a copy of such submission to the other party or parties to the dispute. The other party or parties to such dispute shall have 30 days from the date of notification by the First Division that the submission has been received in which to answer such submission and shall, at the time of filing such answer, furnish copy of the answer to the submitting party or parties.

The submitting party or parties shall then have 30 days from the date of notification by the division that such answer has been received in which to file a reply to such answer if desired and, at the time of filing such reply, shall furnish copy thereof to the opposing party or parties.

Such reply shall be limited to response to the answer and shall contain no new facts or matter not in direct response to the points contained in such answer.

Nothing herein shall change existing rules or practices with respect to extensions of time and they shall be applicable to submissions, answers or replies.

In announcing that the agreements had been signed, the Mediation Board commended the parties "for this major contribution to amicable labor relations, because it proves once again that there is no substitute for true collective bargaining." The N.M.B. announcement also said that the backlog of grievances which is expected to be dissipated by the agreements "has been a constant source of friction in the railroad industry for more than 10 years, and has been the cause of frequent threats of interruption to railroad service."

ROCK ISLAND INSTALLS NEW RESERVATION SYSTEM AT CHICAGO.—With a view toward increasing speed and efficiency in handling train reservations, the Chicago, Rock Island & Pacific has begun operation of a circular rotating-type reservation board at the LaSalle Street station in Chicago. The board holds space listings of all Rock Island main line high-speed passenger trains, and reservation clerks seated around the facility need only to spin the board and pull the needed train diagram from its slot. Calls for space are received directly by the clerks who respond to the flashing of a light on the panel. Each position is equipped with an electric clock, and overhead fluorescent lighting provides "daylight" illumination at all times. The railroad says the new board can accommodate over 3,000 units of space and receive 2,000 telephone calls daily

Volume of Wood Treated Decreased in 1948

A total of 281 plants, representing 95 per cent of the capacity of the wood-preserving industry, treated 285,091,501 cu. ft. of wood in 1948, according to a preliminary report prepared by the U. S. Forest Service, in cooperation with the American Wood-Preservers' Association. This was a decrease of 20 per cent from the 349,485,790 cu. ft. treated in 1947 at 285 plants. The decrease in amount of wood treated was paralleled by a corresponding decrease in consumption of preservatives. Liquid preservatives dropped from 283 to 230 million gallons, and consumption of salts decreased from 16.4 to 9.1 million pounds.

Decreases were noted in all types of material treated except switch ties, wood blocks and miscellaneous materials. Although crossties, piling and telephone poles were among those categories showing decreases, they continued to lead in volume of pressure-treated forest products. The amount of switch ties treated increased from 138,279,902 f.b.m. to 138.6 million. On the other hand, the number of crossties treated decreased from 47,878,976 in 1947 to 41 million in 1948; piles from 16,179,277 lin. ft. to 15.6 million; number of poles from 7,808,635 to 5 million; timbers from 100,203,452 f.b.m. to about 67 million; and number of crossarms from 5,988,980 to 2 million.

Victory Tax for Forty-Hour Week

The Brotherhood of Railway Clerks has levied a special assessment of $5 on all members employed by carriers which are party to the 7-cent hourly wage increase and 40-hr. week agreement for non-operating employees. "The expense of the wage-hour movement of 1948-49 was unusually heavy," according to the Railway Clerk, brotherhood publication, "because of the vigorous resistance of the carriers," and the special levy is necessary "to provide additional funds to meet these expenses, to tackle many other problems affecting the welfare of our members, and to take full advantage of the opportunities that this latest victory gives us to enlarge our membership." The $5 assessment was the first to be levied by the brotherhood's grand lodge since 1932.

Asks Equal Chance for RRs

Equality in governmental policies for all forms of transportation was urged by Earl B. Padrick of Chicago, chairman, Trans-Continental and Western Passenger Associations, in an address before the St. Louis (Mo.) Traffic Club on May 16. Mr. Padrick said "the railroads must be

given an equal opportunity by the government to meet competition."

The railroads pay for the cost of maintaining their own rights-of-way, he said, while those of their competitors by air and highway are paid for through government subsidies. The speaker pointed out that the recent modernization of St. Louis' Lambert Field airport cost the city, state and federal governments over a million dollars, while the million-dollar expenditure to modernize the railroads' St. Louis Union Station will be paid by the carriers themselves. Lambert Field airport is city-owned and tax-free, Mr. Padrick said. He observed that in 1948 the St. Louis Terminal Railroad Association paid a little over $183,000 in taxes on Union Station facilities.

Pullman Company, Conductors Reach Accord in Disputes

In a joint announcement on May 17, The Pullman Company and the Order of Railway Conductors, Pullman System, stated that an agreement had been reached concerning the disputes which caused the conductors to call a strike for March 31. (See *Railway Age* of March 26, page 105). The walkout was subsequently suspended upon intervention by the National Mediation Board, as was noted in the *Railway Age* of April 2.

A. G. Wise, general chairman, O.R.C., and J. P. Leach, assistant vice-president of Pullman, said that the agreement disposed of "disputes growing out of the interpretation of the conductors' working rules as applied to various special operating conditions in Pullman sleeping car service." One set of claims, involving certain types of occasional service in Canada, will be referred to a special adjustment board, to be established to hear and consider the claims of both parties and make a report of its conclusions thereon, according to the joint announcement.

T. E. Bickers, who conducted several weeks of mediation services, complimented both parties for the spirit exhibited in "reaching a settlement of these disputes under the mediation procedures of the Railway Labor Act, which otherwise," he said, "might have resulted in serious interruption of sleeping car service on the nation's railroads."

Pennsylvania Experiments With "Radar" Cooking

Microwave energy developed for wartime radar, harnessed to provide the fastest method of cooking food ever known, has been adapted to a railroad car by the Pennsylvania, which is conducting experiments in so-called "radar" cooking.

Cooking all parts of the food at the same moment, the new Radarange unit, developed by the Raytheon Mfg. Company, requires only 15 seconds to cook hamburger, 45 seconds for steak, and two minutes for a half chicken. The unit, with an oven only 18 in. high, 19½ in. wide, and 20½ in. deep, is housed in a small temporary kitchen in the center of the experimental cafe coach. Meals are served at six 4-place tables, and eight lounge chairs, each having an adjustable tray on the right arm rest.

Railroad officers indicated that, while the experimental car will operate occasionally in regular service, there is no intention at this time to use the present installation permanently. It will serve only for research and experimentation to determine the practicability of "radar" cooking on the railroad's dining cars and in its other food services.

Microwave energy for cooking is introduced into the stainless steel oven by a single electronic tube. The oven itself reflects the energy and remains cool, as do china and glass. Food is placed on the plates on which it will be served and placed in the unit. When removed for serving, the food is piping hot and retains all natural juices, while the platters are cool. Soup and baked desserts, as well as the main course, can also be prepared in the unit.

April Employment

Railroad employment increased 1.67 per cent—from 1,195,289 to 1,215,212 — from mid-March to mid-April, but the mid-April total was 3.37 per cent below that of April, 1948, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-1939 average as 100, was 121 for April, as compared with 120.1 for March and 125.2 for April, 1948.

April employment was above that of the previous month in four groups, while decreases were shown for three groups. The largest increase, 7.88 per cent, was in the maintenance of way and structures group; the others, all less than one per cent, were in executives, officials and staff assistants, maintenance of equipment and stores, and the transportation group embracing train and engine service employees.

As compared with April, 1948, there were decreases in all groups except that embracing executives, officials and staff assistants, which was up 0.32 per cent. The decreases ranged from 0.55 per cent for the maintenance of equipment and stores group to 8.48 per cent for the group embracing transportation employees other than those in train, engine and yard service.

Cheap Waterway Transportation?

More than 40 years ago the Congress was told that dredging a six-foot navigation channel in the Missouri river between St. Louis and Kansas City would cost $3,500,000 . . . to maintain it $150,000 per year. Congress approved the project.

Result: During the past 40 years something over $185,000,000 has been spent on capital expenditures on the Missouri river between St. Louis and Sioux City, Ia. . . . maintenance cost $100,000,000.

What did the tax payers get for their money? In the latest year for which commercial statistics are available, after deducting traffic due strictly to river developments, and after deducting the sand and gravel business, which would have been there regardless of the navigation channel, there was left about 106,000 tons of commercial traffic. Taking all charges into consideration the cost of handling this traffic was over $100 per ton. Converted into ton-miles the cost was over 35c per ton-mile, while it could have been handled faster by Missouri Pacific for a little more than 1c per ton-mile.

Yet we are continually being told that inland waterway transportation is cheap.

—Missouri Pacific Lines News Reel

A. A. R. Completes New Public Relations Film

You and Your Railroads, a 16-mm. sound-color motion picture, running about 19 min., has just been completed by the Public Relations Department of the Association of American Railroads for showing to business, professional and civic organizations, railroad employee groups, and students at or above the high school level.

The film deals in plain and simple terms with some of the basic elements of railroad economics, and discusses the railroad business as it relates to the everyday life and affairs of the public generally, to industry and agriculture, and to the whole national economy. It presents in photography and animated graphs facts, figures and illustrations to show what railroads do and how it is done; and what it takes in the way of manpower, investment, plant, power, teamwork, research and improvement to provide the reliable all-weather mass transportation upon which American production, marketing and distribution depend.

The A. A. R. is prepared to furnish one print without charge to each railroad in position to make active use of it, and to supply additional prints at exact cost.

Charges Brotherhoods Driving Negroes Out of Railroad Service

Brotherhoods of the "big four" group have been engaged for 40 years in a "persistent effort" to "drive Negroes out of railroad service," Representative Powell, Democrat of New York, charged last week at hearings before a subcommittee of the House Committee on education and labor. The subcommittee, of which Mr. Powell, a Negro, is chairman, is considering a pending bill (H.R.4453) to establish a federal fair employment practices commission for the purpose of prohibiting discrimination in employment

because of race, color, religion, or national origin.

The congressman made his charge in the course of his questioning of representatives of the brotherhoods whom he had invited to appear at the hearing to explain the policies of their unions. The questioning also pointed up the fact that all four brotherhoods have provisions in their constitutions which limit their memberships to white persons.

Mr. Powell's invitations went to the chief executives of the unions, but they delegated the task to their Washington representatives. Thus the appearances were made by Harry See, national legislative representative, Brotherhood of Railroad Trainmen; J. A. McBride, vice-president and national legislative representative, Brotherhood of Locomotive Firemen & Enginemen; W. D. Johnson, vice-president and national legislative representative, Order of Railway Conductors; and John T. Corbett, assistant grand chief engineer and national legislative representative, Brotherhood of Locomotive Engineers.

The basis for Mr. Powell's questioning of the brotherhood representatives had been laid in a presentation made at an earlier session of the hearing by Charles Houston, general counsel of the Negro Railway Labor Executives' Committee who was a member of the Fair Employment Practices Committee which functioned during World War II. Mr. Houston, whom Chairman Powell had asked to prepare "pertinent questions" which the committee might ask the brotherhood representatives, was on hand when the latter appeared. And he went to the witness chair from time to time to offer rebuttal testimony.

As each of the brotherhood representatives appeared, he was confronted by Chairman Powell with a "bill of particulars" designed to show by a listing of specific actions that a consistent policy of discrimination against Negroes has been maintained. On the list were cases indicating that in both world wars railroads proposing to employ Negroes for train and engine-service positions were forced by threats of strikes or strike votes to abandon such proposals.

With respect to the brotherhood constitutional provisions limiting membership to white persons, Mr. McBride of the B. of L. F. & E and Mr. Johnson of the O.R.C. said that their unions had acted in recent conventions to adopt "saving clauses" which stipulated that if the "white-only" provisions were held to be in violation of any law, the law would supersede such provisions. No such clause has yet been added to the B. of R. T. and B. of L. E. constitutions; but Messrs. See and Corbett, as did Messrs. McBride and Johnson, assured Chairman Powell that their respective brotherhoods, as "good citizens," would abide by any federal law which might be enacted. As to that, Chairman Powell said at one point that the hope of the bill's sponsors was to "make good Americans out of some who don't seem to understand."

J. G. Lyne New President of Associated Business Papers

At the annual convention of the Associated Business Papers, held at Hot Springs, Va., May 18 to 21, James G. Lyne, editor of *Railway Age* and president of the Simmons-Boardman Publishing Corporation, was elected A. B. P. president for a term of one year. Mr. Lyne succeeds E. F. Hamm, Jr., publisher of Traffic World.

The bill was "President Truman's bill," the chairman said, adding that he had not seen it until House Majority Leader McCormack, Democrat of Massachusetts, "handed me a copy that came to him from [Attorney General] Tom Clark." Each of the four brotherhood representatives said that his union had taken no position either for or against the proposed legislation.

Sorry—Wrong Company

In our issue of May 14, page 965, the description of Remington Rand's new electric typewriter erroneously stated that the dual feed device was supplied by the General Register Company. This device is supplied by the Standard Register Company.

N. Y. C. to Inaugurate New Boston-Chicago Train June 9

The "New England States Limited" between Boston, Mass., and Chicago will be inaugurated on June 9 by the New York Central System. To be operated every night in both directions over the Boston & Albany and the Central's main line between Albany, N. Y., and Chicago, the new all-stainless steel cars are being completed by the Budd Company. The trains will cost about $4,000,000, including Diesel-electric motive power.

Canadian Employees to Ask Wage Increase, 40-Hour Week

A group of international railway brotherhoods representing 100,000 Canadian railroad employees announced in Montreal, Que., last week that it will seek a 40-hour week and higher basic wage rates this summer. A statement from 15 brotherhoods affiliated with the American Federation of Labor was the second announcement in two days making public intentions of seeking revisions of the 10-months-old agreement with the railroads.

The Canadian Brotherhood of Railway Employees, through W. J. Smith, general secretary of its system adjustment board, had previously announced its intention to ask a 30 per cent wage increase and 40-hour week, among other things. The C.B.R.E. has 25,000 members.

More than 150,000 railroad employees in Canada, some non-union members, were granted a 17-cent wage boost last July, bringing average wages to $1.09 an hour. Under last July's agreement the work week was left at 48 hours in nearly all railway branches except the locomotive shops, where a 44-hour week is in force.

Emergency Board Created

President Truman has created an emergency board to investigate a dispute between the Union (of Pittsburgh, Pa.) and those of its employees who are represented by the Brotherhood of Railroad Trainmen. The dispute, which had brought a strike threat from the brotherhood, involves working rules.

First Rail Fair Ticket Sold; Other Plans Announced

Ticket number one to the Railroad Fair at Chicago, which opens its 100-day run on June 25, was sold on May 20 at the lakefront fairgrounds. F. G. Gurley, president of the Atchison, Topeka & Santa Fe and a director of the fair, sold the first block of tickets to John McCaffery, president of the International Harvester Company, while Major Lenox R. Lohr, fair president, officiated. The transaction occurred before the giant sign at the fair's main entrance. A new method devised for obtaining general admission tickets to the fair is through the purchase of blocks of tickets by companies with large numbers of employees for distribution in their factories and offices, Major Lohr announced. Souvenir ticket books of four admissions have been established for distribution outside the grounds. Tickets may be removed from the book and sold individually. Stubs may be retained as a fair memento. As last year, individual admissions will be 25 cents.

Industries which supply the railroads will spend $150,000 to sponsor an ice show at the fair, featuring six performances daily by 12 skaters of the Shipstads & Johnson Ice Follies. Accommodations will be available at each show for 1,200 persons. The ice review is intended to supplement the highly successful Wheels-A-Rolling pageant, from which many persons were turned away at last year's fair, due to lack of seats.

It is expected that when the solicitation of funds for the show is completed, some 700 supply companies will be represented. However, no individual company names are to be used in connection with the review, and its presentation will not preclude individual exhibits.

The railway supply committee soliciting funds—the major portion of which has already been subscribed—is headed by Thomas Drever, board chairman, American Steel Foundries, Chicago.

The Union Pacific will present a Western Wonderlands exhibit. Animated dioramas of western vacationland life will be housed in a Spanish-American structure patterned after the road's passenger station at Boise, Idaho. A

miniature streamliner will offer free rides to youngsters on 750 ft. of track circling the U. P.'s "Big Boy," world's largest steam locomotive.

The Chesapeake & Ohio will operate a restaurant, "The Chessie Club," in a twin-unit diner and a tavern-lounge car at the fair. The diner, which seats 52 persons, is decorated in dark oak veneer paneling with ivory ceilings. In the tavern-lounge car the decorative feature is a large cylindrical goldfish bowl. Diners awaiting seating will be served soft drinks. Adjacent to "The Chessie Club" on the exhibition tracks will be the C. & O.'s "500" steam turbine-electric locomotive.

R. B. A. Advocates Repeal Of Transportation Taxes

"The excise taxes upon amounts paid for transportation of persons and property should be repealed *now* in the public interest," the Railway Business Association declares in a four-page pamphlet, sized to fit into regular business envelopes and just issued by P. Harvey Middleton, R. B. A. president.

The pamphlet, entitled Why Transportation Taxes Should be Repealed *Now*, says in part: "At a time when there is a surplus of seats on all common carrier equipment, travelers must pay a federal transportation tax of 15 per cent, in addition to the price of the ticket—a war tax originally designed, in part, to discourage civilian travel.

"At a time when every effort is being made by private enterprise to keep prices down, shippers using common carrier transportation must pay a federal transportation tax of 3 per cent. . . . That tax is included in every movement of the goods—on the transport of the raw material to the factory or to the mill; from the plant to the distributor or retailer—thus pyramiding prices.

"Repeal of the transportation tax would constitute a 15 per cent reduction in fares for the traveling public. That would be a powerful aid in the development of new and additional business for the transportation industry—business which is sorely needed if that industry is to serve the public adequately and efficiently.

"The tax on the travel of officers and employees of a business concern directly increases the transportation costs of that business. These increased costs are, in turn, reflected in prices which that business must charge for its products. . .

"Only common carrier transportation is subject to this tax. . . . The 15 per cent tax on travel by common carriers and the 3 per cent tax on shipments by common carriers are therefore artificial incentives to the expansion of private carriage, to the substantial disadvantage of the railroads and other 'for-hire' carriers.

"When freight traffic is diverted from common carriers to private carriers, the railroads or the commercial carriers on the highways and airways are not only deprived of the earnings from the lost traffic, but they must also spread their costs of doing business over a reduced volume. Any higher costs thus resulting must eventually be reflected in the rates charged for the remaining traffic."

Copies of the pamphlet may be obtained, free of charge, by writing to Mr. Middleton at 38 South Dearborn street, Chicago.

Freight Car Loadings

Loadings of revenue freight in the week ended May 21 totaled 773,911 cars, the Association of American Railroads announced on May 26. This was an increase of 2,175 cars, or 0.3 per cent, above the preceding week, a decline of 105,266 cars, or 12.0 per cent, under the corresponding week last year, and a drop of 116,694 cars, or 13.1 per cent, under the equivalent 1947 week.

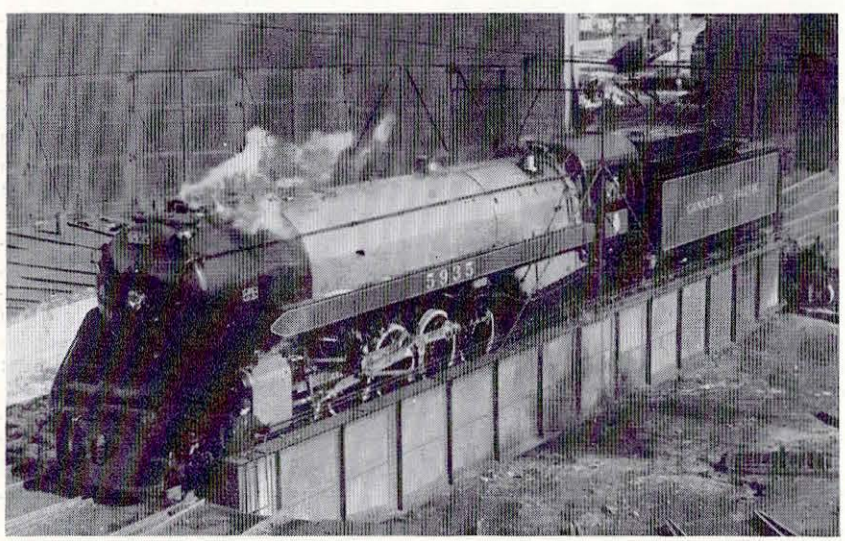
Loadings of revenue freight for the week ended May 14 totaled 771,736 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, May 14

District	1949	1948	1947
Eastern	137,936	152,480	162,591
Allegheny	163,365	180,534	189,716
Pocahontas	64,483	71,598	73,951
Southern	118,259	137,781	139,014
Northwestern	117,437	121,716	131,377
Central Western	113,337	119,887	125,539
Southwestern	56,919	62,949	66,020
Total Western Districts	287,693	304,552	322,936
Total All Roads	771,736	846,945	888,208
Commodities:			
Grain and grain products	46,276	38,057	42,286
Livestock	9,173	9,250	13,225
Coal	157,404	194,750	189,419
Coke	13,242	14,985	14,288
Forest products	39,876	42,994	48,356
Ore	74,115	72,157	72,597
Merchandise l.c.l.	93,715	107,650	121,042
Miscellaneous	337,935	367,102	386,995
May 14	771,736	846,945	888,208
May 7	768,337	880,287	884,242
April 30	785,444	891,115	882,574
April 23	769,336	851,926	893,712
April 16	765,890	784,611	865,844
Cumulative total 19 weeks	13,573,791	14,763,430	15,717,883

In Canada.—Carloadings for the week ended May 14 totaled 74,104 cars, compared with 74,354 cars for the previous week, and 77,458 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
May 14, 1949	74,104	30,870
May 15, 1948	77,458	33,876
Cumulative totals for Canada:		
May 14, 1949	1,377,365	604,101
May 15, 1948	1,404,208	686,205



THE LAST OF THE "SELKIRKS."—No. 5935, the 36th oil-burning steam locomotive of the "Selkirk" type, recently accepted by the Canadian Pacific for service through the Rocky Mountains between Calgary, Alta., and Revelstoke, B. C., may be the last steam locomotive acquired by the C. P. R., with Diesels expected to meet the road's future motive power requirements

Freight Traffic Group Leases New Quarters

After more than 37 years in its present location, the Central Territory Railroads Freight Traffic Committee, formerly the Central Freight Association, has leased larger office quarters in the State-Madison building, Chicago. Occupation of the new quarters will permit the organization to consolidate departments now operating in five separate offices.

Bureau of Explosives Issues 1948 Annual Report

Last year was the 27th consecutive year in which no explosions occurred in connection with the railroad transportation of Class A commercial explosives, according to the annual report for 1948 of the Bureau of Explosives of the Association of American Railroads. The total reported property loss caused by the transportation of explosives of all kinds was $9,834, of which $8,000 was charged

to a fire involving military smoke-producing devices classed as "fireworks" under Interstate Commerce Commission regulations. A fire developed in a carload shipment of these devices because of defects in the devices themselves, the report said, and not because of negligence on the part of the railroad.

The headquarters' and laboratory staff have completed the study of proper specifications for railroad fusees, the report added, and these specifications, together with those for torpedoes which were published during 1947, are now effective and have been distributed to all railroads.

Contrary to a rumor which gained some publicity, the report went on, there has been no serious accident as the result of the rail transportation of radioactive materials.

The transportation of dangerous articles other than explosives last year resulted in property losses totaling $829,995 and 725 accidents, including 64 fires and 24 explosions. Although 24 persons were injured there were no fatalities. Among the accidents, electric storage batteries accounted for 146; gasoline for 137; crude oil for 61; sulfuric acid for 51; compressed gas, liquified petroleum for 55; hydrochloric acid for 35; and nitric acid for 27.

Railroad Labor Trends Follow National Pattern, Loomis Says

The railroad industry is going to be "hard put" when the 40-hour work-week goes into effect, September 1, D. P. Loomis, chairman of the Association of Western Railways, told the Decatur, Ill., Rotary club on May 23.

Railroad rates, Mr. Loomis declared, "have increased proportionately much less than prices in other industries and the prices of materials and supplies which railroads buy. It can be safely said that the increase in productivity of the railroad plant has been somewhat greater than that of other industry. That has been a big factor in the railroads' performance."

Discussing labor trends in the industry, Mr. Loomis said experience shows that the carriers have been obliged to follow the pattern set by other industry. Fact-finding boards, appointed under the provisions of the National Railway Labor Act, have been strongly influenced by the national pattern. "In the recent 40-hour week case," he said, "the demands of the railroad brotherhoods were based on the premise that every other major industry in the country had the 40-hour week . . . "The recent Diesel case was a different matter. That was purely and simply a case of trying to force the railroads to use additional men where we did not think they were needed."

Additional General News appears on page 63.

ORGANIZATIONS

Mechanical Division Program

The sessions of the twenty-third annual meeting of the Mechanical Division, Association of American Railroads, will be held in the Gold Room of the Congress Hotel, Chicago, June 27-29, inclusive. The program will be as follows:

MONDAY, JUNE 27
10:00 a.m. to 5:00 p.m.*

Address by G. Metzman, president, New York Central System.
Address by J. H. Aydelott, vice-president, Operations and Maintenance Department, Association of American Railroads.
Address by W. J. Patterson, member, Interstate Commerce Commission.
Address by Chairman, Mechanical Division, A. K. Galloway, general superintendent motive power and equipment, Baltimore & Ohio.
Action on minutes of annual meeting of 1948.
Appointment of committees on subjects, resolutions, etc.
Unfinished business.
New business.
Report of General Committee.
Report of Nominating Committee.
Discussion of reports on:
- Locomotive Construction:
  - Steam and Electric Locomotive Section.
  - Diesel Locomotive Section.
  - Gas-Turbine Locomotive Section.

TUESDAY, JUNE 28
9:30 a.m. to 5 p.m.*

Address by J. E. Goodwin, vice-president and executive assistant to president, Chicago & North Western.
Discussion of reports on:
- Arbitration.
- Prices for Labor and Materials.
- Brakes and Brake Equipment.
- Geared Hand Brakes.
- Loading Rules.
- Specifications for Materials.
- Couplers and Draft Gears.
- Lubrication of Cars and Locomotives.
- Development of Hot-Box-Alarm Devices.
- Safety Appliances.

WEDNESDAY, JUNE 29
9:30 a.m. until program is completed*

Discussion of reports on:
- Tank Cars.
- Wheels.
- Car Construction.

Election of members of General Committee and Committee on Nominations.
Report of Committee on Resolutions.

*Chicago Daylight Saving Time

W. H. Hillis, vice-president of the Chicago, Rock Island & Pacific, was elected president of the **Western Railway Club** at the annual meeting in Chicago on May 23. L. J. Ahlering, purchasing agent of the Chicago & Eastern Illinois, was elected first vice-president, and J. P. Morris, assistant to vice-president of the Atchison, Topeka & Santa Fe, was elected second vice-president. Re-elected treasurer and executive secretary, respectively, were A. Schiffers, Jr., purchasing agent of the Union Tank Car Company, and E. E. Thulin of the Earl Thulin Company.

A regional meeting sponsored by the **New England Shippers Advisory Board** in cooperation with the **Associated Industries of Vermont** and the **Vermont State Railroads Association** will take place at the Woodstock Inn, Woodstock, Vt., on June 2, to provide an opportunity for patrons of railroad freight service and railroad executives to meet and discuss, informally, from a mutual standpoint, the current rail transportation outlook in Vermont. Following a 6:30 p.m. dinner, F. P. Philbrick, president and general manager of the Crosby Milling Company, Brattleboro, Vt., will speak in behalf of Vermont industry. Speakers for the railroads will be T. G. Sughrue, executive vice-president, Boston & Maine and Maine Central; M. A. Metcalf, vice-president and executive assistant, Canadian National; D. S. Thomason, vice-president, eastern region, Canadian Pacific, and W. E. Navin, trustee, Rutland. Reservations are being handled by Clarence E. Cleveland, executive secretary, Vermont State Railroads Association, Montpelier, Vt.

The **Medical and Surgical Section** of the **Association of American Railroads** will hold its twenty-ninth annual meeting on Monday, June 6, at Chalfonte-Haddon Hall, Atlantic City, N. J. R. M. Graham, M. D., director, department of sanitation and surgery, The Pullman Company, Chicago, is chairman of the section; O. H. Horrall, M. D., chief surgeon, Chicago, Burlington & Quincy, Chicago, vice-chairman; and J. C. Caviston, New York, secretary. The program for the morning session will include committee reports; a panel discussion on Railroad Medical Problems, led by Dr. Graham, is scheduled at 2 p.m. William White, president of the Delaware, Lackawanna & Western, will be the guest speaker at the luncheon, at 1 p.m.

The American Locomotive Company, along with other industrial concerns, is sponsoring a three-day conference on Safety and Efficiency for industrial organizations, June 28-30, at the **College of the City of New York**. Alfred R. Lateiner, accident control consultant for the college's extension division, will supervise the conference.

SUPPLY TRADE

Johns-Manville's New Research Center Dedicated

The new research center of the Johns-Manville Corporation at Manville, N. J., was dedicated on May 24 by Governor Alfred E. Driscoll of New Jersey in ceremonies attended by several hundred scientists, engineers, builders, diplomats and journalists. The visitors inspected the four buildings of the research center, which is located on a 93-acre tract on the Raritan river, about 40 miles from New York, and saw research scientists at work on the more than 400 lines of Johns-Manville products. An illustrated feature story on the research center was published in the *Railway Age* of October 25, 1947, pages 42-43.

Harnischfeger Formally Opens Eastern Service Headquarters

The Eastern district service headquarters of the Harnischfeger Corporation in Teterboro, N. J., were formally opened

on May 21 when the company held "open house" for visitors. The firm's lines of P & H crawler and truck-mounted shovels and cranes, 2-cycle Diesel engines, overhead electric traveling cranes, monorail hoists and single pass soil stabilizers were shown in actual operation.

The **Hyster Company,** Portland, Ore., has announced the removal of its Seattle, Wash., store from 2219 Fourth avenue to 753 Ninth avenue.

The **McKay Company** has announced the removal of the electrode sales department to its executive offices in the McKay building, Pittsburgh, Pa. **Fred A. Kaufman,** electrode sales manager, and his entire staff, formerly at York, Pa., will maintain headquarters at 1005 Liberty avenue, Pittsburgh 22.

Arthur B. Pike, Kaylo insulation sales engineer, has been assigned to the New England territory for the **American Structural Products Company,** a subsidiary of the Owens-Illinois Glass Company. With headquarters at 1227 Statler building, Boston 16, Mass., Mr. Pike's territory will include all of New England except part of Connecticut.

R. P. Connette has been appointed assistant to the president of the **American Car & Foundry Co.,** with headquarters in New York. Mr. Connette was graduated from Harvard University and also received a bachelor of law degree from the

R. P. Connette

University of Virginia Law School in 1941. He joined the public relations department staff of American Car & Foundry in October, 1945, after four years' naval service. In August, 1947, he was transferred to the executive department, in charge of the suggestion system and training program.

The Boston district sales office of **Cutler-Hammer, Inc.,** Milwaukee, Wis., has been moved to 784 Commonwealth avenue, Boston 15, with **C. V. Topliffe** in charge.

The **Yale & Towne Manufacturing Co.** has announced the opening of a new building at 5845 Centre avenue, Pittsburgh, Pa., to be devoted to the local, factory approved, spare parts, maintenance, repair, and sales services on all material handling machinery made by Yale.

T. F. Perkinson, whose appointment as manager of the transportation engineering division of the apparatus department of the **General Electric Company** was announced in the *Railway Age* of May 21, was graduated from Rensselaer Polytechnic Institute in 1924. After graduation he joined G. E. as an electrical engineer at Schenectady, N. Y., and, a year later, transferred to Erie, Pa., headquarters of the locomotive and car equipment divisions. In 1945 he was appointed manager of the railroad rolling stock division and the following year assistant manager of the transportation engineering division.

T. F. Perkinson

C. M. Davis, former manager of the transportation engineering division, whose retirement was announced in the *Railway Age* of May 21, was graduated from the University of Michigan with an electrical engineering degree and from Union College, Schenectady, with a master's degree. He joined G. E. in 1909, and a year later was assigned to the consulting engineering department. In 1913, he entered what is now the transportation division and, in 1924, was sent to Australia to represent the company in connection with the electrification of the Sydney suburban lines of the New South Wales Government Railways. Mr. Davis was appointed engineer of the transportation department in 1934 and manager of the transportation engineering division in 1945.

C. M. Davis

The **Whiting Corporation,** Harvey, Ill., and Los Angeles, Cal., has announced the appointments of the following distributors: The **George E. Miller Company,** 24 Brighton avenue, Boston 34, Mass.; the **Grays Metal Works,** 56th street and Grays avenue, Philadelphia 43, Pa., and the **James J. Burke Company,** 405 Kearns building, Salt Lake City 1, Utah.

John H. Leslie, formerly vice-president in charge of research and engineering of the **Signode Steel Strapping Company,** Chicago, has been elected president to succeed his father, **John W. Leslie,** who has been elected chairman of the board. **John S. Gorman,** formerly vice-president and director of sales, has been elected vice-chairman of the board. **J. M. Moon** has been promoted from sales manager to director of sales.

John H. Leslie

The appointment of **V. E. Lawford** as sales representative in the northern California territory has been announced by the **Buckeye Tools Corporation,** Dayton, Ohio. With headquarters at 656 31st street, Oakland, Cal., Mr. Lawford will service the area between Bakersfield and the Oregon state line, with the exception of a few counties in the northeast corner of the state.

John R. Thompson, who joined the staff of the **Simmons-Boardman Publishing Corporation** as western district manager of advertising sales, transportation papers, at Chicago, in August, 1948, has been named vice-president, advertising sales, transportation papers, with headquarters remaining at Chicago. He has also been

appointed business manager of *Railway Engineering and Maintenance*, succeeding **S. Wayne Hickey**, a vice-president of the corporation in overall charge of advertising sales, Simmons-Boardman transportation publications, whose principal headquarters are now in New York.

Mr. Thompson was born at Toronto, Ont., on July 23, 1900, and was educated at the University of Toronto. He became assistant financial editor of the Toronto Globe in 1918, and from 1920 to 1923 he was a junior account executive in the advertising agency of A. McKim, Ltd., at Toronto. In 1924 he became advertising manager of Consolidated Press at To-

John R. Thompson

ronto. The following year Mr. Thompson went with the Maclean Hunter Publishing Corporation as manager of its Chicago office. From 1937 until 1940 he was advertising manager of Maclean's magazine, with headquarters at Toronto. He then returned to Chicago as vice-president and treasurer of the corporation, in charge of the United States publishing activities of the Inland Printer, Chemical Industries, and Rock Products, the position he was holding when he became associated with Simmons-Boardman.

The **Portland Cement Association** district offices in Dallas, Tex., and Austin, have been consolidated into a single district office in the latter city, and **James D. Piper**, formerly the association's district highway engineer at Dallas, has been appointed district engineer in charge of all work in Texas.

The **White Manufacturing Company**, Elkhart, Ind., has appointed the following sales representatives for its railway switch heaters; **John A. Roche**, 80 East Jackson boulevard, Chicago; **C. D. Hicks & Co.**, 7908 Bonhomme avenue, Clayton (St. Louis) 5, Mo.; and **William H. Zeigler Company**, 2929 University avenue, Minneapolis, Minn. The latter two companies will also handle other products of White Manufacturing.

Gilfry Ward has been appointed vice-president in charge of sales of the American manganese steel division of the **American Brake Shoe Company**, with headquarters at Chicago Heights, Ill. Mr. Ward has been with Brake Shoe since

Gilfry Ward

he was graduated from Yale University in 1928, and has spent many years on both the east and west coasts with its sales organization.

CAR SERVICE

Revised Service Order No. 562 has been issued by the Interstate Commerce Commission for the purpose of continuing until May 25, 1950, the arrangement under which Homer C. King, director of its Bureau of Service, functions as a commission agent with authority to divert and reroute freight and empty cars to avoid congestion. The revised order became effective May 26. It stipulated that the commission was of the opinion that continuance of the diversion-agent plan would promote better car service, and that this view was "supported by the Association of American Railroads, Car Service Division, and the American Short Line Railroad Association."

A partial embargo designed to allow movement of grain only where storage space is available, has been issued on shipments of grain in the winter wheat belt, it was announced May 25 by Arthur H. Gass, chairman of the Car Service Division, Association of American Railroads. The embargo, which becomes effective June 1, affects only grain consigned for storage, and has been issued to prevent congestion and undue delay of box cars at grain storage points, including the terminal and sub-terminal markets.

Mr. Gass stated that Kansas, Nebraska, Colorado, Missouri, Oklahoma, Texas (except the ports of Port Arthur, Galveston and Houston), Council Bluffs Iowa, and East St. Louis, Ill., are covered by the embargo.

"Two factors made the embargo necessary," Mr. Gass declared. "First, storage facilities in the winter wheat belt are more than half full with grain held over from last year in addition to a heavy carry-over of grain on farms and at country elevators. Second, is the beginning of the present harvest of a near bumper crop of winter wheat. The impact created by the arrival of all this grain wtihout any form of control would result in congestion at terminals and would tie up vitally needed box cars."

Under provision of the embargo, Mr. Gass stated, no permits are required, but the shipper of grain by rail must certify on the bill of lading or reconsignment order that arrangements for storage have been made. Grain moving to a market for sale is not affected by the embargo, he added. Mr. Gass emphasized that the railroads are ready to move all grain for which proper storage space is available.

ABANDONMENTS

Applications have been filed with the Interstate Commerce Commission by:

Jamestown, Westfield & Northwestern.—To abandon its entire line, from Jamestown, N. Y., to Westfield, 32.5 mi. The application stated that substantial operating losses in each of the past five years have resulted in an accrued deficit of $637,105, and have made "apparent that this short-line railroad cannot be successfully operated."

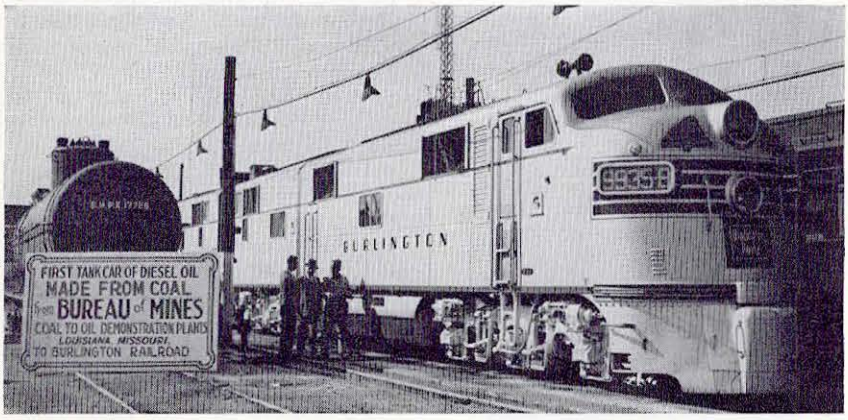
Virginian.—To abandon trackage rights and operation over the Chesapeake & Ohio's Glen Jean subdivision from Pax, W. Va., through Sugar Creek Junction to Oswald and to Garden Ground, 18.2 mi. The abandonment would become effective June 22, 1950, the expiration date of the joint-use agreement. The application said that the Virginian is willing to continue after the abandonment the same rates and divisions now in effect with the C.&O.

Winona.—To abandon its entire line, from New Paris, Ind., to Winona Lake, 23.6 mi., of which 3.1 mi. is owned by its subsidiary, the Winona & Warsaw. The latter is a party to the application, which said that increasing losses from operation have made it impossible to pay such obligations as interline rate divisions, per diem charges, taxes, and wages due employees.

Division 4 of the I.C.C. has **authorized**:

Colorado & Southern.—To abandon a 1.6-mi. segment of its Clear Creek branch from Denver, Colo., to Zuni. The C.&S. also was authorized in the same application to acquire joint use of a 3.4-mi. line of the Denver & Rio Grande Western from Prospect to Zuni. The report said the abandonment would enable the D.&R.G.W. to expand its terminal facilities in the Denver area and that the C.&S. would derive considerable benefit from the new operating plan.

BURLINGTON TRAIN MOVES ON OIL FROM COAL.—In connection with the dedication, on May 8, of two units of a United States Bureau of Mines demonstration plant at Louisiana, Mo., for converting coal into oil, the Chicago, Burlington & Quincy made a test run with a Diesel-hauled passenger train from St. Louis, Mo., to Louisiana, using oil produced at the government plant



EQUIPMENT AND SUPPLIES

Equipment on Order

Class I railroads and railroad-owned and controlled refrigerator car lines had 57,429 new freight cars on order May 1, compared with 117,701 on order May 1, 1948, according to the Association of American Railroads. This year's May 1 total of cars on order by all railroads and private car lines was 62,369.

New freight cars placed in service during April by Class I roads and their affiliated refrigerator car lines totaled 10,027; and the A.A.R. statement noted that this marked "the second consecutive month in which the number installed has exceeded 10,000." March installations totaled 10,556 cars. Installations during this year's first four months totaled 37,520 cars, compared with 31,704 placed in service during the same period of 1948; the four-months total of locomotives installed was 689, compared with 411.

The 57,429 cars on order May 1 by the railroads and their car-line affiliates included 26,329 to be built in railroad shops and 31,100 on order from contract builders. The breakdown by types of cars was as follows: Box 8,880, including 8,580 plain and ventilated and 300 auto box; hoppers, 23,807, including 2,428 covered hoppers; gondolas, 14,992; flat, 4,325; refrigerator, 3,954; stock 717; miscellaneous, 754.

Class I roads on May 1 also had on order 1,172 locomotives, including 1,130 Diesel-electrics, 38 steam, and 4 electrics. On May 1, 1948, there were on order 1,572 locomotives, including 1,455 Diesel-electrics and 117 steam. The 689 locomotives placed in service during this year's first four months included 657 Diesel-electrics and 32 steam.

Freight cars retired during the first four months by Class I roads and their affiliated refrigerator car lines totaled 26,113, compared with 21,036 retired during the first four months of 1948. The April, 1949, retirements totaled 6,763 cars.

FREIGHT CARS

The **Southern** has ordered 200 70-ton steel covered hopper cars from the Pullman-Standard Car Manufacturing Company at an approximate cost of $1,200,000. The cars, the inquiry for which was reported in the *Railway Age* of April 23, are expected to be delivered during August.

SIGNALING

The **Norfolk & Portsmouth Belt Line** has ordered from the Union Switch & Signal Co. materials required to furnish protection at six street crossings at grade in Portsmouth, Va. Material includes Style HC-81 flashing-light crossing signals, instrument cases, relays, rectifiers and transformers. Field installation will be handled by railroad forces.

The American Locomotive Company has ordered from the General Railway Signal Company 25 sets of intermittent inductive train control equipment for installation on Diesel road switchers being built for the **Southern**.

The **Niagara Junction** has ordered equipment from the General Railway Signal Company for installation of a two-way train radio communication system comprising nine mobile units and one fixed station. This system will operate on a frequency of 160-59 m.c.

The **New York Central** has ordered from the Union Switch & Signal Co. one 18-cylinder, double-rail, Model-31 electro-pneumatic car retarder, involving 112.33 rail feet of retardation, for installation in the Sharonville, Ohio, classification yard.

IRON & STEEL

The **Florida East Coast** has ordered 6,000 net tons of steel rail from the Carnegie-Illinois Steel Corporation and 1,000 net tons from the Bethlehem Steel Company.

CONSTRUCTION

I. C. Will Spend $3,000,000 Improving Classification Yards

A five-year, $3,000,000 improvement program has been started by the Illinois Central at its two classification yards in Markham yard, on the southern outskirts of Chicago. The railroad will install pushbutton route control of switches — the first of its kind to be placed into service in a yard in the western hemisphere. This new system will enable an operator to set all switches, in a route from the top of the hump to a classification track below, by pushing a button corresponding to the track number to which the car is destined.

Other improvements will include changes in gradients, regrouping of switches to reduce the number of retarders, reduction of curvatures, and the installation of more powerful retarders of the latest design. The betterment program is being undertaken to increase the efficiency of the yard by permitting faster and safer handling of freight cars. Markham yard is 3½ mi. long, contains 114 mi. of track, and has a capacity of nearly 9,000 cars. Its ultimate capacity will be 14,000 cars.

Atlantic Coast Line.—This road has authorized the construction of icing tracks at Fitzgerald, Ga., at a probable cost of $29,857.

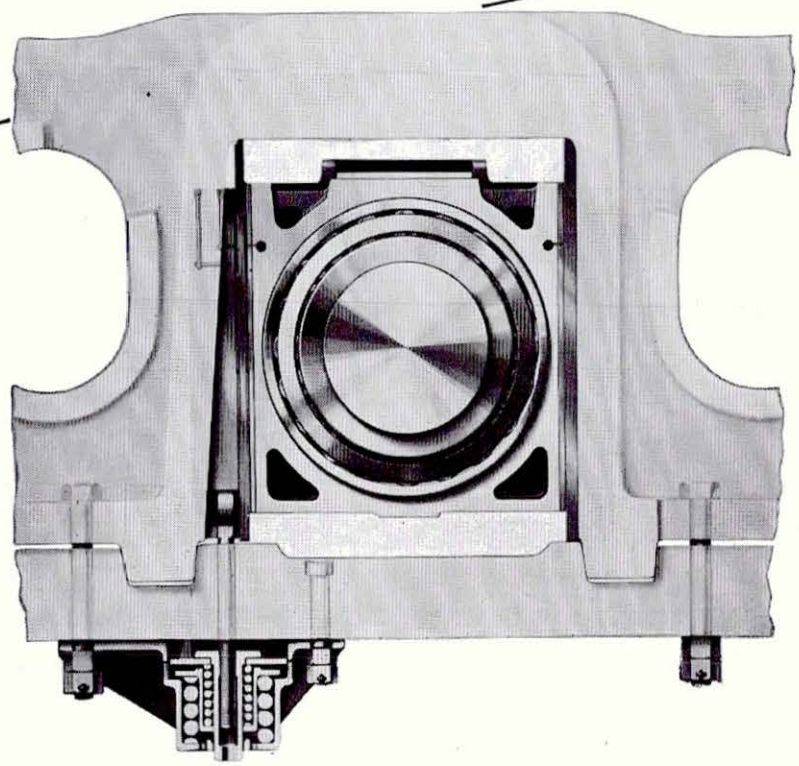
Baltimore & Ohio.—This road has awarded the following contracts at a total estimated cost of $180,000: To the Hauser Construction Company, Philadelphia, Pa., for constructing meat-handling facilities at Dickinson and Vandalia streets, Philadelphia; to John Naumann & Sons, Toledo, Ohio, for constructing a yard office and locker building at Toledo (Rossford); and to Vogt & Conant, Cleveland, Ohio, for erecting a superstructure on bridge 10 at Baltimore, Md.

Grand Trunk Western.—This road has awarded a contract to Hamer Brothers, Inc., Detroit, Mich., for construction of four concrete pile and slab double-track bridges, with a total length of 225 ft., replacing timber trestles, near Haskells, Ind., Mill Creek, Duffield, Mich., and Emmett, at a cost exceeding $100,000.

News Department continued on next left-hand page

59 Roads Cut Maintenance Costs

. . . WITH COMPENSATORS AND SNUBBERS



Here are twenty of the fifty-nine railroads using Compensators and Snubbers. These roads have installed them on roller-bearing locomotives:

A. T. & S. F.
C. & N. W.
C. M. St. P. & P.
Clinchfield
Delaware & Hudson
D. M. & I. R.
D. L. & W.
Great Northern
Missouri Pacific
Northern Pacific
N. C. & St. L.
New York Central
Norfolk & Western
Southern Pacific
S. P. & S.
Texas & Pacific
Union Pacific
Western Maryland
Railways of France
National Railways of Mexico

Experience of 59 railroads clearly demonstrates that maintenance costs are reduced by the use of the Franklin Compensator and Snubber on driving boxes. Equally important with roller-bearing or surface-bearing locomotives, this device keeps the driving box, or housing, snug in the pedestal jaw, regardless of expansion or wear. Driving box pound is eliminated. Wear, and the possibility of failure, of crank pins and rod bearings are minimized. Tire mileage is extended by reduction of quarter slip.

FRANKLIN RAILWAY SUPPLY COMPANY

A CORPORATION

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
FIRE DOORS • DRIVING BOX LUBRICATORS • OVERFIRE JETS • JOURNAL BOXES • FLEXIBLE JOINTS • CAR CONNECTION

the prospective operating economies at about $74,000 a year; and it said that the over-all effect on the Southern's net railway operating income before federal taxes would be an increase of about $325,000 per year.

Wisconsin Central. — *New Directors.* — Harry H. Kierman, Lester Martin and Frank B. McMullen have been elected members of this road's board of directors to represent the preferred stockholders' committee.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Chicago, Burlington & Quincy.—To assume liability for $2,060,000 of equipment trust certificates to finance in part the acquisition of 200 40-ft. refrigerator cars with air circulating fans at a unit price of $8,535 and 100 40-ft. meat refrigerator cars without fans at a unit price of $8,900. Total estimated cost of all the equipment is $2,597,000. The certificates would be dated June 1 and would mature in 20 semi-annual installments of $103,000 each beginning December 1. They would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Chicago, Rock Island & Pacific—To assume liability for $3,120,000 of equipment trust certificates to finance in part 19 Diesel-electric locomotives and 450 freight cars at an estimated total cost of $4,177,750. The locomotives, being built by the Electro-Motive Division of the General Motors Corporation, will include 9 1,500-hp. suburban passenger engines costing $159,000 each, and 10 600-hp. switchers costing $76,000 each. The freight cars, being built by the American Car & Foundry Co., will be 70-ton hoppers costing $4,415 each. The certificates would be dated July 1, would mature in 24 semi-annual installments of $130,000 each, beginning January 1, 1950, and would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Reading.—To assume liability for $3,700,000 of Series Q equipment trust certificates to finance in part the acquisition of the following equipment:

	Description and builder	Estimated Unit Cost
11	1,000-hp. Diesel-electric switching locomotives with standard controls (Baldwin Locomotive Works)	$ 97,485
4	1,000-hp. Diesel-electric switching locomotives with multiple unit controls (Baldwin)	98,750
750	50-ton all-steel hopper cars (Bethlehem Steel Company	4,310

Total estimated cost of all of the equipment is $4,700,000. The certificates would be dated June 15 and would mature in 20 semi-annual installments of $185,000 each, beginning December 15. They would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Seaboard Air Line.—To assume liability for $3,435,000 of equipment trust certificates to finance in part the following equipment:

	Description and builder	Estimated Unit Cost
23	1,500-hp. Diesel-electric road switching locomotives (American Locomotive Company)	$146,730
6	All-stainless steel lightweight 6-double-bedroom, 10-single-bedroom sleeping cars (Budd Company)	140,700
6	Stainless steel lightweight 6-double-bedroom-buffet-lounge cars (American Car & Foundry Co.)	130,650

The total estimated cost of all the equipment is $4,611,000. The certificates would be dated June 1, would mature in 15 annual installments of $229,000 each, beginning June 1, 1950, and would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Southern.—To assume liability for $7,500,000 of series RR equipment trust certificates to finance in part 88 passenger-train cars expected to cost a total of $10,000,000. The equipment was listed in the application as follows:

	Description and builder	Estimated Unit Cost
24	6-bedroom, 10-roomette cars (Pullman-Standard Car Manufacturing Company)	$121,900
11	4-bedroom, 14-roomette cars (Pullman-Standard)	124,500
6	All-stainless steel lounge-coach cars (Budd Company)	116,700
4	lounge-bedroom cars (Pullman-Standard)	127,250
1	dining-lounge car (American Car & Foundry Co.)	133,500
2	observation-bedroom cars (Pullman-Standard)	126,700
2	baggage-dormitory cars (A.C.F.)	85,200
19	All-stainless steel coaches (Budd)	100,800
7	coaches (A.C.F.)	100,800
8	All-stainless steel dining cars (Budd)	125,200
2	mail-baggage cars (Pullman-Standard)	79,000
2	mail-baggage cars (A.C.F.)	79,000

The certificates, dated June 15, would mature in 30 semi-annual installments of $250,000 each, beginning December 15, and would be sold on the basis of competitive bids, the interest rate being fixed by such bids.

Division 4 of the I.C.C. has **authorized:**

Chicago & North Western.—To assume liability for $6,210,000 of equipment trust certificates to finance in part 5 Diesel-electric locomotives and 1,250 freight cars which are expected to cost a total of $7,785,375 (see *Railway Age* of April 23, page 61). The certificates, dated June 1, will mature in 15 annual installments of $414,000 each, beginning June 1, 1950. The commission's report approved a selling price of 99.78 with a 2⅜ per cent interest rate—the bid of Harriman, Ripley & Co. and Lehman Brothers, which will make the average annual interest cost approximately 2.42 per cent. The certificates were reoffered to the public at prices yielding from 1.4 to 2.6 per cent, according to maturity.

New York Central.—To assume liability for $10,725,000 of equipment trust certificates to finance in part 56 Diesel-electric locomotives and 900 gondola cars which are expected to cost a total of $13,734,360 (see *Railway Age* of April 30, page 66). The certificates will be dated May 15, and will mature in 15 annual installments of $715,000 each, beginning May 15, 1950. The commission's report approved a selling price of 99.2299 with a 2⅝ per cent interest rate—the bid of Halsey, Stuart & Co. and 23 associates which will make the average annual interest cost approximately 2.76 per cent. The certificates were reoffered to the public at prices yielding from 1.5 to 2.85 per cent, according to maturity.

Dividends Declared

Alabama Great Southern.—ordinary, $4.00; 5% participating preferred, $4.00; both payable June 29 to holders of record May 28.

Catawissa.—5% preferred 1st issue 75¢, semi-annual; 5% preferred 2nd issue, 75¢, semiannual, both payable May 23 to holders of record May 9.

Chesapeake & Ohio.—common, 75¢, quarterly, payable July 1 to holders of record June 7.

Chicago & Eastern Illinois.—$2.00 class A, $1.00, payable June 10 to holders of record May 28.

Erie & Pittsburgh.—7% guaranteed, 87½¢, quarterly, payable June 10 to holders of record May 31.

Great Northern.—non-cumulative preferred, $1.00, payable June 21 to holders of record May 23.

Illinois Central leased lines.—4% guaranteed, $2.00, semiannual, payable July 1 to holders of record June 10.

Kansas, Oklahoma & Gulf.—6% preferred A, $3.00, semiannual; 6% non-cumulative preferred B, $3.00, semiannual; 6% non-cumulative preferred C, $3.00, semiannual; all payable June 1 to holders of record May 21.

Norfolk Southern.—75¢, quarterly, payable June 15 to holders of record June 1.

North Pennsylvania.—$1.00, quarterly, payable May 25 to holders of record May 18.

Philadelphia, Germantown & Norristown.—$1.50, quarterly, payable June 4 to holders of record May 20.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, $1.75, payable June 1 to holders of record May 20.

Southern Pacific.—$1.25, quarterly, payable June 20 to holders of record May 31.

Virginian.—62½¢, quarterly, payable June 24 to holders of record June 10.

Average Prices Stocks & Bonds

	May 17	Last week	Last year
Average price of 20 representative railway stocks	39.76	38.79	54.66
Average price of 20 representative railway bonds	86.18	86.37	89.09

	May 24	Last week	Last year
Average price of 20 representative railway stocks	38.59	39.76	54.78
Average price of 20 representative railway bonds	85.73	86.18	89.64

RAILWAY OFFICERS

EXECUTIVE

H. B. Parr, whose appointment as assistant to traffic vice-president of the Canadian National at Montreal, Que., was reported in the *Railway Age* of May 7, was born at Toronto, Ont., and began

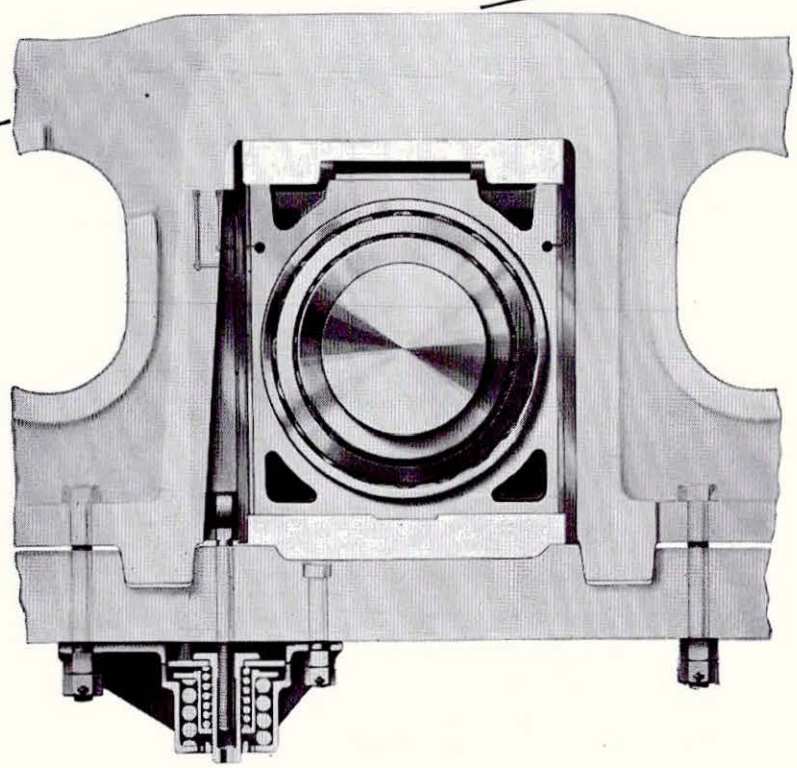
H. B. Parr

his railway service there in 1919 as a stenographer in the district freight office of the Grand Trunk (C.N.R.). In 1923 Mr. Parr was transferred to Montreal, where, after serving in various clerical capacities, he was appointed chief rate

News Department continued on next left-hand page

59 Roads Cut Maintenance Costs

. . . WITH COMPENSATORS AND SNUBBERS



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C. M. St. P. & P.
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Delaware & Hudson
D. M. & I. R.
D. L. & W.
Great Northern
Missouri Pacific
Northern Pacific
N. C. & St. L.
New York Central
Norfolk & Western
Southern Pacific
S. P. & S.
Texas & Pacific
Union Pacific
Western Maryland
Railways of France
National Railways of Mexico

Experience of 59 railroads clearly demonstrates that maintenance costs are reduced by the use of the Franklin Compensator and Snubber on driving boxes. Equally important with roller-bearing or surface-bearing locomotives, this device keeps the driving box, or housing, snug in the pedestal jaw, regardless of expansion or wear. Driving box pound is eliminated. Wear, and the possibility of failure, of crank pins and rod bearings are minimized. Tire mileage is extended by reduction of quarter slip.

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Minneapolis, St. Paul & Sault Ste. Marie.—This company has awarded a contract to E. W. Wylie, Inc., for construction of toilet and locker room facilities in the roundhouse at Thief River Falls, Minn. The cost is estimated at $25,000.

Norfolk Southern.—This road has authorized changing its rail at Raleigh, N. C., from 80 lb. to 100 lb. The work, to be done by company forces, will cost approximately $32,832.

Northern Pacific.—Division 4 of the Interstate Commerce Commission has denied this road's application for authority to construct a 4-mi. branch line extending from a point near Mitchell Spur, Wash., to Moses Lake, to serve agricultural developments. The application was opposed by the Chicago, Milwaukee, St. Paul & Pacific, but local interests in and around Moses Lake intervened in support of it. The C.M.St.P.&P. contended that the proposal was an attempt to invade its territory. The commission's report stated that carriers have no legal right to exclusive occupancy of a territory, but, in this case, it has not been shown that there is a need of a new line of railroad. In denying the application, the commission said the N.P. could renew its application at some future date, if and when it appears that the existing railroad facilities are inadequate to meet the then public convenience and necessity.

Reading.—This road has awarded contracts, at the indicated estimated costs, to John Meehan & Son, Philadelphia, Pa., for extending bridge 6/72 at Pencoyd, Pa. ($32,000), and to the J. C. Shawfield Company, Harrisburg, Pa., for repairing coal trestles at Harrisburg ($21,000).

Richmond, Fredericksburg & Potomac.—This road has awarded a contract to the Howard-Mitchell Construction Company, Richmond, Va., for a new freight station, costing an estimated $90,000, at Quantico, Va. An authorized project for a 76-ft. extension to a machine shop at the Acca locomotive terminal, Richmond, including two 200,000-gal. fuel oil storage tanks, will probably cost $190,000. This project has not yet been offered for bids.

FINANCIAL

Norris Decries Railroads' Subsidized Competition

"Subsidized competition is making serious inroads on the traffic of the self-supporting railroads," Ernest E. Norris, president of the Southern, told the road's stockholders at their annual meeting in Richmond, Va., last week. "These 'termites' in the transportation field," he continued, "can eventually destroy the whole system of private enterprise of which the railroad industry is the keystone, unless they are made to stand on their own financial feet as railroads do."

Comparing the Southern's revenues for the years 1940 and 1948, Mr. Norris said that although gross revenues increased from $105,905,000 in the earlier year to $245,013,000 in 1948, "enormously rising costs of all kinds left only an additional $7,500,000, in today's 50-cent dollars, in our net railway operating income. Regardless of what we do to increase our efficiency and economy, the results are constantly minimized or nullified by the continually outstretched hands of the 'gimme' boys. We've got to work more than twice as hard merely to stand still."

Investment House Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Baker, Weeks & Harden, One Wall st., New York 5.

Chesapeake & Ohio. (May 2)

Erie Railroad 1st Consolidated 3¼s, Series E, due Oct. 1, 1964. (Apr. 28)

Northern Pacific. (May 18)

Western Maryland First Mortgage Gold 4s, due Oct. 1, 1952. (May 20)

Dreyfus & Co., 50 Broadway, New York 4.

Taking a Different View of Railroad Earnings. A brief analysis of the "dividend potentials" of 29 major Class I railroads, as determined by actual 1948 dividend payments, plus or minus increases or decreases, per share of stock, in debt and working capital. (May 9)

L. F. Rothschild & Co., 120 Broadway, New York 5.

Kansas City Southern 4 Per Cent Non-Cumulative Preferred. (May 3)

Smith, Barney & Co., 14 Wall st., New York 5.

Illinois Central. (Railroad Bulletin No. 29, May 16)

Vilas & Hickey, 49 Wall st., New York 5.

Chicago, Milwaukee, St. Paul & Pacific Income "A" 4½s, 2019, Compared with Chicago & North Western Income "A" 4½s, 1999. (May 6)

Akron Union Passenger Depot.—*Bonds.*—Division 4 of the Interstate Commerce Commission has dismissed this company's application for authority to issue $2,000,000 of first-mortgage bonds, proceeds of which were to have been applied toward construction of a new passenger station in Akron, Ohio. The dismissal order noted that a letter expressing the applicant's desire to withdraw the application had been received by the commission. (See *Railway Age* of April 17, 1948, page 64).

Chicago Great Western.—*New Directors.*—On May 17, Guy A. Gladson, of Winston, Strawn & Shaw, of Chicago, was elected a director of this road with term expiring in 1954, to succeed the late Ralph Shaw, whose death was reported in the *Railway Age* of May 7 and 14. L. Russell Kelce, president of the Sinclair Coal Company, was elected also a director to succeed the late Grant Stauffer, former president of the C. G. W. William N. Deramus, III, new president of the road, and John D. Ames, publisher, Chicago Journal of Commerce, were elected directors to fill vacancies for terms expiring in 1952.

Colorado & Southern.—*Joint Use.*—Division 4 of the Interstate Commerce Commission has authorized this road to acquire joint use of a 3.4-mi. line of the Denver & Rio Grande Western from Prospect, Colo., to Zuni. In the same report, the C.&S. was authorized to abandon a 1.6-mi. segment of its Clear Creek branch from Denver, Colo., to Zuni.

Kansas City Southern.—*New Director.*—E. M. Douthat has been elected a member of this road's board of directors.

Missouri Pacific.—*New Directors.*—William A. Kissell and Henry T. Mathews have been elected directors of this road to succeed J. Patrick Lannan and the late Walter W. Smith.

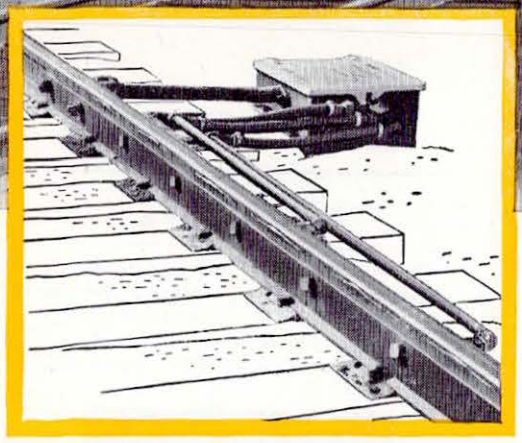
Pennsylvania.—*Debt Increase Authorized.*—Stockholders of this road authorized on May 24 an increase of $100,000,000 in the company's indebtedness. The directors were empowered to issue bonds or other obligations from time to time. (See *Railway Age* of April 2, page 59).

Southern.—*Acquisition of A. & Y. Properties.*—This road has filed with the Interstate Commerce Commission an application for approval of its previously announced plan to acquire all the franchises, rights and properties of its subsidiary, the Atlantic & Yadkin (See *Railway Age* of March 26, page 112). The properties include 149 mi. of line, i.e., the 130-mi. main line between Greensboro, N. C., and Sanford, and the 19-mi. branch between Climax, N. C., and Ramseur. The application stated that the acquisition plan contemplates dissolution of the A. & Y. and distribution of its assets to the Southern as holder of all its stock and bonds. The former consists of 10,000 shares with a par value of $100 each, while the $1,500,000 of bonds comprise a first-mortgage, 4 per cent issue which became due April 1, 1949. The Southern, as guarantor, met the maturity. Benefits expected to result from the proposed acquisition include improved service, operating economies, and reductions in rates. The application explained that the latter will result from the substitution of single-line rates for joint-line rates on some commodities. It put

News Department continued on next left-hand page

Racor model 4000

RAIL LUBRICATORS



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the prospective operating economies at about $74,000 a year; and it said that the over-all effect on the Southern's net railway operating income before federal taxes would be an increase of about $325,000 per year.

Wisconsin Central. — *New Directors.* — Harry H. Kierman, Lester Martin and Frank B. McMullen have been elected members of this road's board of directors to represent the preferred stockholders' committee.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Chicago, Burlington & Quincy.—To assume liability for $2,060,000 of equipment trust certificates to finance in part the acquisition of 200 40-ft. refrigerator cars with air circulating fans at a unit price of $8,535 and 100 40-ft. meat refrigerator cars without fans at a unit price of $8,900. Total estimated cost of all the equipment is $2,597,000. The certificates would be dated June 1 and would mature in 20 semi-annual installments of $103,000 each beginning December 1. They would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Chicago, Rock Island & Pacific—To assume liability for $3,120,000 of equipment trust certificates to finance in part 19 Diesel-electric locomotives and 450 freight cars at an estimated total cost of $4,177,750. The locomotives, being built by the Electro-Motive Division of the General Motors Corporation, will include 9 1,500-hp. suburban passenger engines costing $159,000 each, and 10 600-hp. switchers costing $76,000 each. The freight cars, being built by the American Car & Foundry Co., will be 70-ton hoppers costing $4,415 each. The certificates would be dated July 1, would mature in 24 semi-annual installments of $130,000 each, beginning January 1, 1950, and would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Reading.—To assume liability for $3,700,000 of Series Q equipment trust certificates to finance in part the acquisition of the following equipment:

	Description and builder	Estimated Unit Cost
11	1,000-hp. Diesel-electric switching locomotives with standard controls (Baldwin Locomotive Works)	$ 97,485
4	1,000-hp. Diesel-electric switching locomotives with multiple unit controls (Baldwin)	98,750
750	50-ton all-steel hopper cars (Bethlehem Steel Company	4,310

Total estimated cost of all of the equipment is $4,700,000. The certificates would be dated June 15 and would mature in 20 semi-annual installments of $185,000 each, beginning December 15. They would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Seaboard Air Line.—To assume liability for $3,435,000 of equipment trust certificates to finance in part the following equipment:

	Description and builder	Estimated Unit Cost
23	1,500-hp. Diesel-electric road switching locomotives (American Locomotive Company)	$146,730
6	All-stainless steel lightweight 6-double-bedroom, 10-single-bedroom sleeping cars (Budd Company)	140,700
6	Stainless steel lightweight 6-double-bedroom-buffet-lounge cars (American Car & Foundry Co.)	130,650

The total estimated cost of all the equipment is $4,611,000. The certificates would be dated June 1, would mature in 15 annual installments of $229,000 each, beginning June 1, 1950, and would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Southern.—To assume liability for $7,500,000 of series RR equipment trust certificates to finance in part 88 passenger-train cars expected to cost a total of $10,000,000. The equipment was listed in the application as follows:

	Description and builder	Estimated Unit Cost
24	6-bedroom, 10-roomette cars (Pullman-Standard Car Manufacturing Company)	$121,900
11	4-bedroom, 14-roomette cars (Pullman-Standard)	124,500
6	All-stainless steel lounge-coach cars (Budd Company)	116,700
4	lounge-bedroom cars (Pullman-Standard)	127,250
1	dining-lounge car (American Car & Foundry Co.)	133,500
2	observation-bedroom cars (Pullman-Standard)	126,700
2	baggage-dormitory cars (A.C.F.)	85,200
19	All-stainless steel coaches (Budd)	100,800
7	coaches (A.C.F.)	100,800
8	All-stainless steel dining cars (Budd)	125,200
2	mail-baggage cars (Pullman-Standard)	79,000
2	mail-baggage cars (A.C.F.)	79,000

The certificates, dated June 15, would mature in 30 semi-annual installments of $250,000 each, beginning December 15, and would be sold on the basis of competitive bids, the interest rate being fixed by such bids.

Division 4 of the I.C.C. has **authorized:**

Chicago & North Western.—To assume liability for $6,210,000 of equipment trust certificates to finance in part 5 Diesel-electric locomotives and 1,250 freight cars which are expected to cost a total of $7,785,375 (see *Railway Age* of April 23, page 61). The certificates, dated June 1, will mature in 15 annual installments of $414,000 each, beginning June 1, 1950. The commission's report approved a selling price of 99.78 with a 2⅜ per cent interest rate—the bid of Harriman, Ripley & Co. and Lehman Brothers, which will make the average annual interest cost approximately 2.42 per cent. The certificates were reoffered to the public at prices yielding from 1.4 to 2.6 per cent, according to maturity.

New York Central.—To assume liability for $10,725,000 of equipment trust certificates to finance in part 56 Diesel-electric locomotives and 900 gondola cars which are expected to cost a total of $13,734,360 (see *Railway Age* of April 30, page 66). The certificates will be dated May 15, and will mature in 15 annual installments of $715,000 each, beginning May 15, 1950. The commission's report approved a selling price of 99.2299 with a 2⅝ per cent interest rate—the bid of Halsey, Stuart & Co. and 23 associates which will make the average annual interest cost approximately 2.76 per cent. The certificates were reoffered to the public at prices yielding from 1.5 to 2.85 per cent, according to maturity.

Dividends Declared

Alabama Great Southern.—ordinary, $4.00; 5% participating preferred, $4.00; both payable June 29 to holders of record May 28.

Catawissa.—5% preferred 1st issue 75¢, semiannual; 5% preferred 2nd issue, 75¢, semiannual, both payable May 23 to holders of record May 9.

Chesapeake & Ohio.—common, 75¢, quarterly, payable July 1 to holders of record June 7.

Chicago & Eastern Illinois.—$2.00 class A, $1.00, payable June 10 to holders of record May 28.

Erie & Pittsburgh.—7% guaranteed, 87½¢, quarterly, payable June 10 to holders of record May 31.

Great Northern.—non-cumulative preferred, $1.00, payable June 21 to holders of record May 23.

Illinois Central leased lines.—4% guaranteed, $2.00, semiannual, payable July 1 to holders of record June 10.

Kansas, Oklahoma & Gulf.—6% preferred A, $3.00, semiannual; 6% non-cumulative preferred B, $3.00, semiannual; 6% non-cumulative preferred C, $3.00, semiannual; all payable June 1 to holders of record May 21.

Norfolk Southern.—75¢, quarterly, payable June 15 to holders of record June 1.

North Pennsylvania.—$1.00, quarterly, payable May 25 to holders of record May 18.

Philadelphia, Germantown & Norristown.—$1.50, quarterly, payable June 4 to holders of record May 20.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, $1.75, payable June 1 to holders of record May 20.

Southern Pacific.—$1.25, quarterly, payable June 20 to holders of record May 31.

Virginian.—62½¢, quarterly, payable June 24 to holders of record June 10.

Average Prices Stocks & Bonds

	May 17	Last week	Last year
Average price of 20 representative railway stocks	39.76	38.79	54.66
Average price of 20 representative railway bonds	86.18	86.37	89.09

	May 24	Last week	Last year
Average price of 20 representative railway stocks	38.59	39.76	54.78
Average price of 20 representative railway bonds	85.73	86.18	89.64

RAILWAY OFFICERS

EXECUTIVE

H. B. Parr, whose appointment as assistant to traffic vice-president of the Canadian National at Montreal, Que., was reported in the *Railway Age* of May 7, was born at Toronto, Ont., and began

H. B. Parr

his railway service there in 1919 as a stenographer in the district freight office of the Grand Trunk (C.N.R.). In 1923 Mr. Parr was transferred to Montreal, where, after serving in various clerical capacities, he was appointed chief rate

News Department continued on next left-hand page

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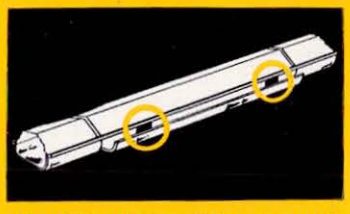

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clerk in 1940. Four years later he was named chief clerk to the traffic vice-president and in 1947 was appointed assistant to freight traffic manager, which position he held until his recent promotion.

Downing B. Jenks, general manager of the Chicago & Eastern Illinois, at Chicago, has been appointed also a vice-president of the railroad. A photograph and biographical sketch of Mr. Jenks appeared in the *Railway Age* of November 13, 1948, in connection with his appointment as general manager.

R. M. McNamara, treasurer of the Washington & Old Dominion, has been appointed vice-president—treasurer (financial and accounting), with headquarters as before at Arlington, Va.

FINANCIAL, LEGAL & ACCOUNTING

David O. Mathews, formerly special assistant to the United States attorney general at Washington, D. C., has been appointed general counsel of the Chicago & Eastern Illinois at Chicago, succeeding to a portion of the duties of **Clair M. Roddewig,** newly elected president of the C. & E. I.

P. Olfelt has been appointed assistant freight claim agent of the Minneapolis, St. Paul & Sault Ste. Marie.

Charles W. Dooling, attorney for the Western Pacific, with headquarters at San Francisco, Cal., has been appointed general counsel at that point. **Elzo L. VanDellen,** also attorney at San Francisco, has been appointed commerce attorney.

OPERATING

C. T. Williams has been appointed superintendent, Southern district, of the Missouri-Kansas-Texas Lines at Muskogee, Okla., succeeding **P. O. Ellis,** who has been promoted to engineer, maintenance of way, at Dallas, Tex.

C. A. Fink has been appointed general manager of the Missouri-Illinois at St. Louis, Mo.

Henry W. Davidson, whose retirement as superintendent, South Texas district, of the Missouri-Kansas-Texas Lines at Smithville, Tex., was reported in the *Railway Age* of May 7, was born on October 25, 1887, at Clifton, Tenn. He entered railroad service with the Katy in October, 1910, as night clerk at Troy, Tex., and later served successively as telegraph operator, operator and agent, district agent of the Texas Central district, and supervisor of claim prevention. He was advanced to yardmaster at Waco, Tex., in November, 1924, and was appointed trainmaster, South Texas district, in December of that year. From 1930 to 1932, he served as superintendent of claim prevention, and was next appointed supervisor of agents. Mr. Davidson returned to Waco in 1934, as trainmaster, becoming superintendent at Smithville in December, 1938.

W. J. Turner, whose appointment as superintendent transportation of the Southern division of the Atlantic Coast Line at Jacksonville, Fla., was reported in the *Railway Age* of April 30, was born in Pike county, Ala., on January 16, 1902. Mr. Turner was graduated from Alabama Polytechnic Institute in June, 1925, with the degree of B.S. in civil engineering. He entered the service of the

W. J. Turner

A.C.L. on June 1, 1925, as rodman at Waycross, Ga., and served successively as transitman, junior engineer, assistant engineer, senior assistant engineer, division engineer, engineer of design and engineer maintenance of way. Mr. Turner became assistant chief engineer at Jacksonville on March 24, 1947, which position he held at the time of his recent appointment as superintendent transportation.

C. W. Veale, acting superintendent of the Waycross district of the Atlantic Coast Line, has been appointed superintendent of that district, with headquarters at Waycross, Ga.

TRAFFIC

R. J. Tozer, whose retirement as general freight agent of the Northern Pacific at Chicago, was reported in the *Railway Age* of May 7, was born on March 7, 1884, at St. Louis, Mo., where he entered railroad service in January, 1900, with the Chicago, Burlington & Quincy. In 1909 he joined the N. P. as traveling freight agent, with headquarters in his home city, and continued to hold that position until 1918, when he left the road to serve for a time on the Chicago & North Western at Madison, Wis. He returned to his former post on the N. P. in 1920, and in June of the same year became general agent at Cleveland, Ohio. In 1922 he was transferred to Pittsburgh, Pa., becoming assistant general passenger agent at Chicago a year later. From 1925 to 1927 he served as general agent of the N. P. at Shanghai, China, and subsequently returned to the United States to become assistant general passenger agent at Seattle, Wash. Mr. Tozer was appointed general agent at San Francisco in 1931, and was transferred to Chicago as general freight agent in April, 1940.

L. W. Sevin has been appointed district freight agent of the Pennsylvania at Cincinnati, Ohio, succeeding **E. R. Norris,** whose transfer to Los Angeles, Cal., was reported in the *Railway Age* of April 9.

R. T. Mason has been appointed general agent, freight department, of the New York Central at Detroit, Mich.

C. B. Chinn has been appointed district passenger agent of the Kansas City Southern Lines at Beaumont, Tex.

L. V. Reef has been appointed district freight agent of the Gulf, Mobile & Ohio at Denver, Colo.

Henry W. Craig, assistant foreign agent of the Canadian National, has been appointed assistant to general freight traffic manager, with headquarters at Montreal, Que., succeeding **H. B. Parr,** who has been appointed assistant to the vice-president in charge of traffic.

Joseph F. Powers, commercial agent of the Lehigh Valley at Philadelphia, Pa., has been appointed division freight agent at Wilkes-Barre, Pa., succeeding **Frank E. Erdman,** who has retired at his own request, after 45 years of service with the L. V.

Joseph L. Tierney, city passenger agent of the Great Northern at San Francisco, Cal., has been promoted to New England passenger agent, with headquarters at Boston, Mass., effective June 1, succeeding **T. F. Carroll,** who has retired.

MECHANICAL

T. J. Conway, road foreman of engines of the Texas & Pacific at Big Spring, Tex., has been appointed fuel supervisor at Dallas, Tex., succeeding the late **H. N. Ricks,** whose death was reported in the *Railway Age* of April 2.

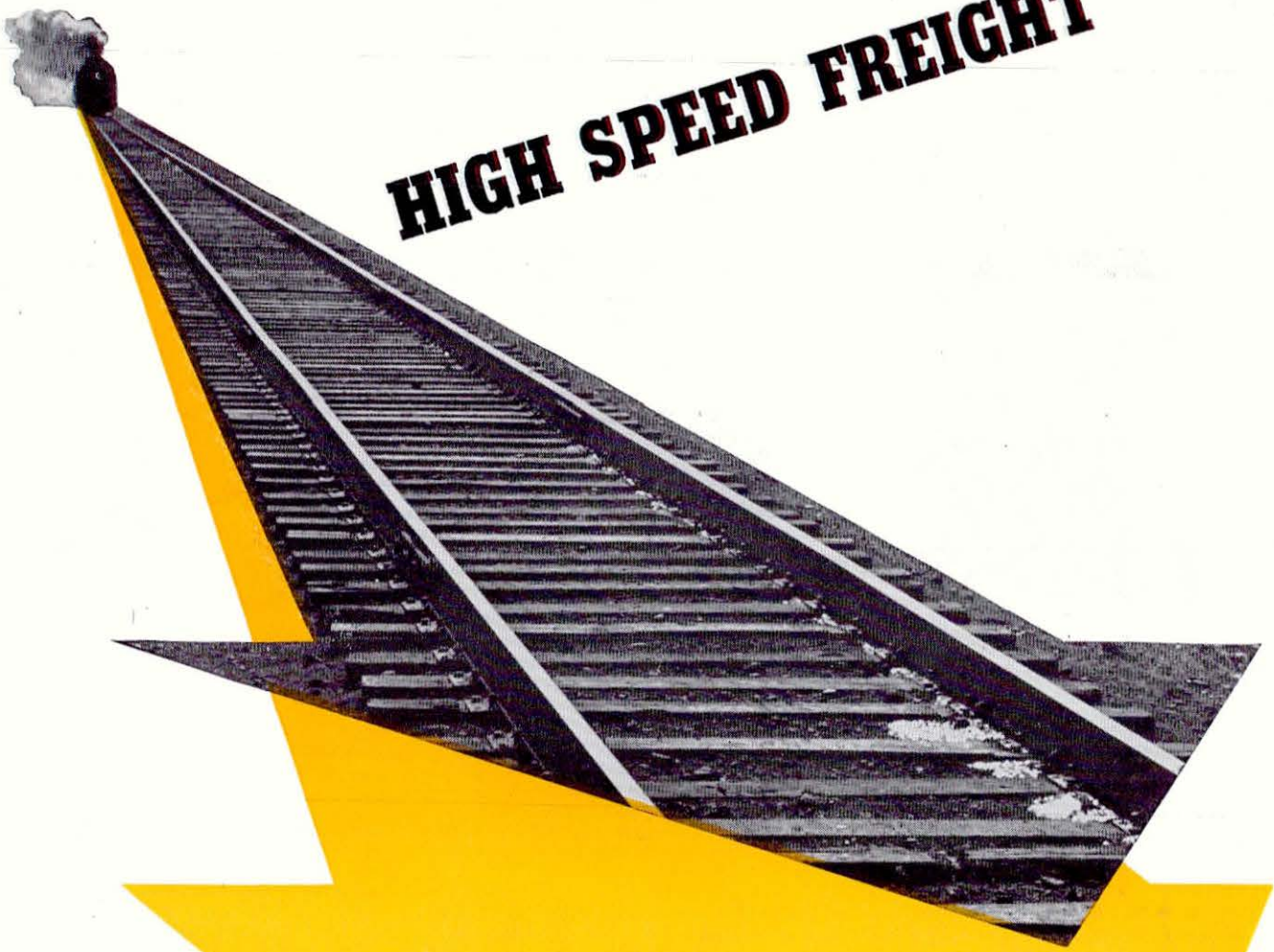
PURCHASES & STORES

E. W. Gatzert has been appointed assistant purchasing agent of the St. Louis-San Francisco at St. Louis, Mo., succeeding **A. G. Denham,** promoted to general storekeeper at Springfield, Mo.

Drury H. Phebus, whose appointment as general storekeeper of the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee, Wis., was reported in the *Railway Age* of May 14, is a native of Beaver City, Neb., and attended school at

News Department continued on next left-hand page

HIGH SPEED FREIGHT



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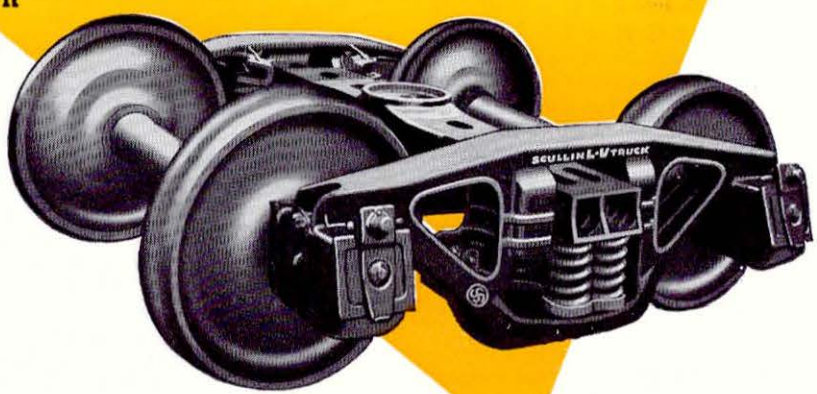

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Plattsmouth, Neb., and the University of Nebraska at Lincoln. He began his railroad career as a laborer in the stores department of the Chicago, Burlington & Quincy, at Plattsmouth, and subsequently served in various capacities with that road. In August, 1920, he joined the Mil-

Drury H. Phebus

waukee as section stockman at Milwaukee, where he also had charge of pricing government inventory. He later served successively as stationery storekeeper, chief clerk to the district storekeeper at Miles City, Mont., division storekeeper at Mobridge, S. D., and chief clerk to the general storekeeper at the Milwaukee shops. From 1936 to 1941, he held the position of district storekeeper, Southern district, at Savanna, Ill., subsequently returning to Milwaukee as assistant to the general storekeeper. He became general storekeeper there in June, 1943, and in February, 1949, was promoted to acting general storekeeper, which post he held at the time of his recent appointment.

ENGINEERING & SIGNALING

Paul O. Ellis, superintendent, Southern district, Missouri-Kansas-Texas, at Muskogee, Okla., has been appointed engineer maintenance of way, at Dallas, Tex., succeeding the late **James J. Gallagher,** whose death was reported in the *Railway Age* of May 7. A photograph and biographical sketch of Mr. Ellis appeared in the May 7 issue, in connection with his appointment as superintendent at Muskogee.

T. W. Creighton, assistant district engineer of the Canadian Pacific at Vancouver, B. C., has been appointed district engineer, Manitoba district, at Winnipeg, Man., succeeding **W. L. Codington,** who has been granted a leave of absence on account of illness.

SPECIAL

J. I. Poole, assistant superintendent of the Missouri-Kansas-Texas Lines at Parsons, Kan., has been appointed assistant superintendent of rules-safety at that point.

H. E. Jones, executive secretary of the Bureau of Information of the Eastern Railways at New York, has been elected chairman, effective June 1, succeeding **H. A. Enochs,** a railroader for more than 50 years, who is retiring due to ill health. Mr. Jones was born on March 5, 1885, at Ellicott City, Md., and attended the Ellicott City public schools and Strayers Business College. He entered railroad service in 1902 as a stenographer in the general freight office of the Bal-

H. E. Jones

timore & Ohio at Baltimore, Md., and later transferred to the operating department. In May, 1917, Mr. Jones was appointed examiner, Bureau of Information of the Eastern Railways, and subsequently served as chief examiner, assistant secretary and secretary, succesively, becoming executive secretary of the bureau in December, 1940. During World War I he was assistant chief of the Labor Bureau, Eastern region, United States Railroad Administration.

H. E. Greer, Jr., whose appointment as chief of personnel of the Reading at Philadelphia, Pa., was reported in the *Railway Age* of May 14, was born on August 14, 1914, at Memphis, Tenn. After graduation from Memphis city high school in 1932, Mr. Greer attended State Teachers College, Memphis, for one semester; Gregg College, Chicago, and Brown's Secretarial School, St. Louis, Mo., for 18 months, evenings; Northwestern University, Evening division, for three and one-half years, and spent one year in the Civilian Conservation Corps as company clerk and assistant to company commander. He entered railroad service in May, 1934, as an office boy with the Illinois Central at Chicago and subsequently served as dictaphone operator, stenographer-clerk, secretary and statistician to assistant traffic manager, traveling secretary and assistant chief clerk to general superintendent, secretary to office manager, and traveling secretary to vice-president and general manager at Chicago and St. Louis. In February, 1943, Mr. Greer was appointed transportation inspector and nine months later he became trainmaster, which position he held successively on the Louisiana and Iowa divisions and at Chicago. In 1945 he served with the Western Carriers'

H. E. Greer, Jr.

Conference Committee on the Operating Rules Case. Mr. Greer went with the Association of Western Railways at Chicago in May, 1946, as assistant examiner, becoming examiner in February, 1947, chief examiner in July, 1947, and carrier member, Fourth division, National Railroad Adjustment Board (Per Diem Basis) in April, 1948.

OBITUARY

George Marion Hart, who retired as superintendent of dining cars of the Wabash on December 31, 1939, died at his home at Santa Monica, Cal., on May 19.

Edward D. Cotterell, who retired in January, 1947, as vice-president of the Eastern lines of the Canadian Pacific at Toronto, Ont., died at Vancouver, B. C., on May 18, at the age of 68. Mr. Cotterell was born in England on January 26, 1881, and joined the Canadian Pacific as a messenger in 1897. He left the C. P. R. to join the New York Central, rising to the position of chief dispatcher of the Hudson division in 1910. Rejoining the Canadian Pacific in 1913. Mr. Cotterell spent 19 years at Winnipeg, Man., the last four as general superintendent of the Manitoba district. He transferred to the Saskatchewan district at Moose Jaw, Sask., in November, 1931, and to the Alberta district at Calgary, Alta., in May, 1942. Mr. Cotterell became general manager of the Eastern lines in October, 1942, and vice-president and general manager of the Eastern lines in October, 1944, serving as vice-president of those lines from January, 1946, until his retirement in January, 1947.

Fred M. Steele, assistant vice-president of the Ft. Dodge, Des Moines & Southern at Boone, Iowa, died on May 20, at the age of 72.

GENERAL NEWS

(Continued from page 51)

B. & O. Sponsors Safety Essay Contest for Children

A $1,300 safety essay contest for children in the families of Baltimore & Ohio employees has been announced by that company, as part of its program to emphasize the importance of accident prevention both at home and on the job. The contest is open to children, grandchildren, and younger brothers and sisters of B. & O. employees. Thirty-six prizes totaling $1,300 in United States savings bonds are offered for the best essays of 500 words or less on the subject Railroad Safety Begins At Home. Boys and girls under 19 are eligible in two age groups.

Seventeen Foreign Transport Students Get Certificates

Seventeen students who completed the course of the Third Annual Foreign Transportation Institute, conducted by the American University, Washington, D. C., were awarded certificates at a dinner session at the campus in Washington on May 20. Dr. L. M. Homberger, professor of transportation at the university, was director of the institute. Among those receiving certificates were Philip F. Carmody and Howard H. Knuth, foreign freight agents, St. Louis-San Francisco, and Louis H. Rives, assistant foreign freight agent, Norfolk & Western, who was the class speaker.

George L. Bell, acting director, Office of International Trade, U. S. Department of Commerce, made the principal address at the dinner.

April Revenues 1.3 Per Cent Above Those of April, 1948

From preliminary reports of 83 Class I roads representing 81.1 per cent of total operating revenues, the Association of American Railroads has estimated that the April gross amounted to $598,499,660, an increase of 1.3 per cent above the $590,836,521 reported for the same 1948 month. Estimated April freight revenues were $497,856,136, as compared with April, 1948's $486,509,361, an increase of 2.3 per cent. Estimated passenger revenues totaled $54,923,156, as compared with $56,482,924, a decrease of 2.8 per cent. The estimate for all other revenues was $45,720,368, a decrease of 4.4 per cent below April, 1948's $47,844,236.

Milwaukee Fined $1,000

The Interstate Commerce Commission has been advised that, on May 14, Judge Charles A. Dewey, in the United States District Court for the Southern District of Iowa, imposed a $1,000 fine on the Chicago, Miwaukee, St. Paul & Pacific after the road had entered a plea of nolo contendere to one count of an indictment charging it with violating the Elkins Act. The charges were based on the Milwaukee's failure to collect freight charges within the prescribed credit from Samuel Markman, doing business as the Markman Potato Company.

At the same time, the I. C. C. announcement also said, Mr. Markman was fined $3,000 upon his plea of nolo contendere to three counts of a 10-count indictment. The indictment, the announcement continued, charged Mr. Markman "with accepting concessions in violation of the Elkins Act on shipments of potatoes during the summer of 1948, which he falsely represented 'for potato ship processing' to avoid payment of standard refrigeration charges."

After the fines were imposed, the remaining counts of the two indictments were dismissed. The case was investigated by the commission's Bureau of Inquiry.

S. P.'s "Shasta Daylight" In Service July 10

Two new 15-car, Diesel-powered "Shasta Daylight" streamliners will go into daily service between San Francisco, Cal., and Portland, Ore., on July 10, on a 15½-hr. schedule for the 718-mi. trip, the Southern Pacific announced on May 23. Costing a total of nearly $5 million, the pair of luxury coach streamliners will cut three hours from the best present train time on the Shasta route. They will leave their respective terminals at 7:45 a. m. and arrive at destinations at 11:15 p. m.

Each train will comprise a 6,000-hp. Diesel-electric locomotive, nine chair cars, a parlor-observation car, tavern car, baggage-postal car, and an articulated triple unit comprising a coffee shop, kitchen and dining car. With inauguration of the new train, the S. P. will give its customers an opportunity to see the most scenic portions of the whole Pacific coast by daylight. The "Shasta Daylight" will bring into view many beauty spots through the Sacramento River canyon, past Mt. Shasta, over the Cascade Mountains, and through the Willamette Valley of Oregon. South from San Francisco, the road now operates three pairs of "Daylights" to Los Angeles.

Cars for the new "Shasta Daylights" were ordered nearly three years ago, S. P. President A. T. Mercier points out, "but deliveries were delayed while manufacturers strove to feed production in the face of material shortages and other difficulties." The road is already receiving cars from the builder, he said, one of the first being the tavern car, which, shortly, will be placed in temporary service on the existing "Cascade" to give overnight travellers between San Francisco and Portland a pre-view of the equipment to come on the "Shasta Daylight."

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Freight Operating Statistics of Large Steam Railways — Selected

Region	Road and year	Miles of road operated	Locomotive Miles: Train-miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car-miles: Loaded (thousands)	Car-miles: Per cent loaded	Ton-miles (thousands): Gross excl. locos. & tenders	Ton-miles (thousands): Net rev. and non-rev.	Road-locos. on lines: Serviceable Unstored	Road-locos. on lines: Serviceable Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region	Boston & Maine 1949	1,746	268,613	277,189	11,376	9,750	68.0	619,274	255,307	102	9	12	9.8
	1948	1,746	330,885	346,725	18,660	12,062	70.5	757,286	331,668	108	..	6	5.3
	N. Y., N. H. & Htfd 1949	1,774	260,345	261,863	18,992	10,546	70.5	628,868	278,016	122	15	19	12.2
	1948	1,815	368,805	374,317	30,821	13,995	70.4	844,597	377,797	145	..	33	18.5
Great Lakes Region	Delaware & Hudson 1949	794	242,615	291,784	32,772	10,630	66.2	757,511	387,438	122	45	22	11.6
	1948	794	295,920	356,625	36,625	12,966	71.5	904,835	500,211	122	21	34	19.2
	Del., Lack. & Western 1949	967	247,082	279,613	29,098	10,769	67.5	718,328	325,456	93	37	15	10.3
	1948	970	347,446	393,363	51,452	14,447	73.1	933,326	439,428	121	2	17	12.1
	Erie 1949	2,229	549,220	569,430	41,941	28,348	67.6	1,803,182	764,259	192	89	62	18.1
	1948	2,229	774,239	828,621	65,005	39,360	69.9	2,504,589	1,115,122	268	10	86	23.6
	Grand Trunk Western 1949	971	215,064	219,339	2,249	7,085	66.4	454,572	192,868	56	9	6	8.5
	1948	972	273,166	281,238	2,777	8,900	69.9	557,819	245,479	66	..	11	14.3
	Lehigh Valley 1949	1,239	230,979	247,734	24,222	10,497	68.6	707,693	333,762	70	16	23	21.1
	1948	1,239	327,042	364,145	55,798	14,106	71.8	920,755	448,885	99	4	47	31.3
	New York Central 1949	10,689	2,894,219	3,097,925	189,301	99,931	61.5	7,045,273	3,204,614	993	143	354	23.8
	1948	10,704	3,075,054	3,290,960	255,061	106,412	64.2	7,387,284	3,478,202	1,144	6	333	22.5
	New York, Chic. & St. L. 1949	1,656	581,317	590,307	6,463	21,366	64.4	1,451,453	630,073	137	17	19	11.0
	1948	1,656	697,237	706,543	9,828	27,054	72.2	1,699,092	777,596	153	..	15	8.9
	Pitts. & Lake Erie 1949	221	90,339	92,287	97	3,452	62.8	296,702	171,840	34	3	14	27.5
	1948	223	101,838	104,670	..	3,729	62.9	321,756	187,075	28	..	16	36.4
	Wabash 1949	2,381	573,110	586,698	12,251	19,151	67.6	1,254,408	541,489	154	7	41	20.3
	1948	2,381	653,050	669,104	14,762	23,351	73.1	1,469,701	664,197	163	11	29	14.3
Central Eastern Region	Baltimore & Ohio 1949	6,086	1,634,414	1,974,844	213,685	59,929	61.9	4,266,176	2,069,775	759	132	240	21.2
	1948	6,076	1,984,707	2,458,751	276,968	66,552	66.3	4,759,871	2,381,442	824	1	309	27.2
	Central of New Jersey* 1949	415	60,740	60,964	3,946	2,318	65.8	171,032	89,264	33	5	10	20.8
	1948	418	75,154	80,548	10,152	2,950	66.2	215,209	117,096	45	..	16	26.2
	Central of Pennsylvania 1949	212	67,443	72,237	8,631	2,426	65.1	180,809	95,080	34	8	18	30.0
	1948	213	76,038	87,188	16,785	2,920	70.0	209,386	112,681	44	..	13	22.8
	Chicago & Eastern Ill. 1949	909	126,067	126,549	3,796	4,512	65.0	315,843	151,968	38	19	14	19.7
	1948	909	168,607	169,454	3,835	5,391	70.9	356,325	180,139	56	..	13	18.8
	Elgin, Joliet & Eastern 1949	238	93,690	95,637	129	3,293	64.3	258,225	138,134	43	4	..	..
	1948	391	125,322	130,495	3,301	3,744	67.8	282,643	152,577	54	..	5	8.5
	Pennsylvania System 1949	10,039	3,082,327	3,427,335	406,248	116,291	61.7	8,459,925	4,019,881	1,515	147	264	13.7
	1948	10,023	3,756,554	4,242,621	545,979	138,940	67.7	9,610,854	4,738,728	1,856	2	293	13.6
	Reading 1949	1,324	360,176	376,244	28,743	12,948	61.8	1,035,749	551,332	191	18	31	12.9
	1948	1,350	446,995	484,675	47,142	15,404	66.2	1,178,684	646,524	217	11	32	12.3
	Western Maryland 1949	837	179,417	226,330	34,204	6,746	61.4	563,750	310,677	147	11	15	8.7
	1948	837	220,624	264,887	39,339	7,410	62.0	620,384	342,318	156	3	12	7.0
Pocahontas Region	Chesapeake & Ohio 1949	5,026	1,326,608	1,427,921	61,816	53,949	57.0	4,542,694	2,486,582	565	49	121	16.5
	1948	5 002	1,715,779	1,849,442	85,241	67,630	57.7	5,656,066	3 200,231	626	4	80	11.3
	Norfolk & Western 1949	2,107	679,204	723,461	54,217	30,903	57.2	2,732,955	1,478,407	262	40	20	6.2
	1948	2,107	837,552	901,095	69,245	36,374	57.5	3,227,553	1,770,654	266	20	23	7.4
Southern Region	Atlantic Coast Line 1949	5,543	865,121	880,036	12,945	22,209	60.0	1,531,683	648,101	365	12	96	20.3
	1948	5,552	994,411	1,022,872	15,039	25,932	63.3	1,759,673	784,202	356	1	69	16.2
	Central of Georgia 1949	1,783	258,343	260,397	3,937	6,413	70.9	422,534	197,406	95	2	8	7.6
	1948	1,783	281,663	286 282	5,319	7,060	72.9	460,051	220,588	92	4	10	9.4
	Gulf, Mobile & Ohio 1949	2,854	299,994	300,142	784	13,516	71.7	889,286	429,642	102	11	4	3.4
	1948	2,847	366,928	373,324	357	16,135	74.7	1,038,442	515,408	130	8	10	6.8
	Illinois Central 1949	6,552	1,355,582	1,360,661	47,997	46,220	62.3	3,303,192	1,554,311	551	17	83	12.7
	1948	6,581	1,514,431	1,522,761	53,256	53,057	64.0	3,715,873	1,762,257	576	10	71	10.8
	Louisville & Nashville 1949	4,765	1,199,595	1,294,139	32,684	30,767	61.8	2,257,218	1,147,426	367	32	73	15.5
	1948	4,750	1,528,751	1,676,402	51,087	39,446	64.5	2,871,346	1,513,036	404	..	82	16.9
	Nash., Chatt. & St. Louis 1949	1,051	207,696	210,787	6,065	5,657	72.8	758,723	166,214	75	..	1	13.2
	1948	1,051	274,794	288,533	8,959	6,483	76.7	407,451	193,714	83	..	13	13.5
	Seaboard Air Line 1949	4,142	737,960	782,736	10,558	21,579	62.3	1,526,019	657,738	276	3	47	14.4
	1948	4,141	853,000	921,094	14,182	24,053	66.7	1,647,048	745,583	271	..	56	17.1
	Southern 1949	6,381	1,248,361	1,258,249	16,958	35,939	64.4	2,368,204	1,021,422	441	72	127	19.8
	1948	6,449	1,615,462	1,640,835	28,012	43,376	70.0	2,762,771	1,263,448	546	21	91	13.8
Northwestern Region	Chicago & North Western 1949	8,073	916,351	962,684	29,346	26,439	65.0	1,841,795	806,390	366	15	94	19.8
	1948	8,055	930,607	971,773	25,319	30,356	69.7	1,983,979	910,680	354	14	117	24.1
	Chicago Great Western 1949	1,445	171,904	173,080	9,430	8,083	65.7	539,899	234,592	53	..	11	17.2
	1948	1,445	232,742	234,101	13,311	8,429	69.9	249,032	244,217	55	..	29	34.5
	Chic., Milw., St. P. & Pac. 1949	10,663	1,321,118	1,394,387	56,054	41,340	65.3	2,821,371	1,272,534	493	25	86	14.2
	1948	10,663	1,426,396	1,487,178	61,947	45,197	68 9	3,007,136	1,408,417	492	33	104	16.5
	Chic., St. P., Minn. & Omaha 1949	1,606	205,845	217,923	13,406	5,006	64.4	353,889	156,641	81	1	33	28.7
	1948	1,606	226,085	242,206	12,979	5,427	64.0	391,184	173,317	88	..	23	20.7
	Duluth, Missabe & Iron Range 1949	575	33,901	34,277	732	593	53.4	43,632	19,944	17	10	21	43.8
	1948	569	31,668	31,853	330	504	53.7	35,916	16,015	18	5	27	54.0
	Great Northern 1949	8,222	941,945	947,785	43,829	30,737	68.2	2,077,679	941,639	337	42	57	13.1
	1948	8,237	1,009,531	1,013,296	42,274	33,364	64.3	2,326,491	1,026,328	342	62	72	15.1
	Minneap., St.P. & S. Ste. M. 1949	4,179	347,929	357,021	7,365	10,181	66.4	671,089	309,395	119	..	18	13.1
	1948	4,180	416,805	429,836	10,434	11,678	72.6	738,089	356,839	129	..	22	14.6
	Northern Pacific 1949	6,593	748,138	791,681	52,355	27,322	71.2	1,847,874	881,481	345	15	52	12.6
	1948	6,613	812,937	856,928	54,775	29,576	71.8	1,992,255	958,297	336	27	57	13.6
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1949	13,103	2,376,533	2,531,054	96,275	87,622	66.3	6,800,416	2,325,867	648	160	140	14.8
	1948	13,081	2,548,330	2,697,057	110,490	92,520	69.1	6,029,679	2,545,752	706	123	139	14.4
	Chic., Burl. & Quincy 1949	8,680	1,155,168	1,192,073	44,762	44,562	62.4	3,161,828	1,412,488	396	34	101	19.0
	1948	8,670	1,346,523	1,386,127	51,589	51,433	64.2	3,597,337	1,652,270	443	18	74	13.8
	Chic., Rock I. & Pac. 1949	7,600	1,084,373	1,117,038	19,761	34,725	63.1	2,358,867	1,022,835	276	23	76	20.3
	1948	7,618	1,167,708	1,205,017	18,666	37,906	67.4	2,451,222	1,084,952	301	8	79	20.4
	Denver & R. G. Wn. 1949	2,443	389,340	446,686	66,528	14,309	77.7	915,487	455,194	159	9	46	21.5
	1948	2,443	367,896	415,531	52,978	11,536	72.9	794,700	406,671	151	35	47	20.2
	Southern Pacific 1949	8,090	1,594,762	1,742,106	270,131	67,509	70.9	4,337,682	1,876,314	701	37	178	19.4
	1948	8,109	1,860,397	2,085,073	383,942	79,172	70.7	5,122,017	2,248,251	693	29	194	21.2
	Union Pacific 1949	9,727	1,695,636	1,756,503	141,709	54,468	63.8	3,850,085	1,626,176	538	55	180	23.3
	1948	9,756	2,127,707	2,218,857	151,010	84,120	69.7	5,612,959	2,459,171	544	120	110	14.2
	Western Pacific 1949	1,192	178,260	197,966	24,122	7,529	75.9	477,152	225,549	63	37	23	18.7
	1948	1,192	215,239	237,355	24,207	9,343	79.3	578,690	284,250	63	42	20	16.0
Southwestern Region	International-Gt. Northern* 1949	1,110	181,058	182,232	988	5,670	62.9	405,366	180,353	58	2	11	15.5
	1948	1,110	248,511	251,713	2,144	6,558	66.6	460,300	208,826	71	..	9	11.3
	Kansas City Southern 1949	886	175,648	176,505	2,086	8,242	64.9	581,801	268,384	45	3	6	11.1
	1948	885	199,989	207,965	2,069	8,580	67.1	585,365	274,412	49	1	7	12.3
	Mo.-Kans.-Texas Lines 1949	3,241	516,224	526,363	8,717	16,114	60.2	1,121,643	485,670	113	5	32	21.3
	1948	3,241	451,175	460,318	6,950	15,086	65.9	980,202	430,934	121	1	33	21.3
	Missouri Pacific* 1949	6,989	1,301,164	1,336,026	25,298	42,009	63.1	2,931,120	1,265,492	391	16	56	12.1
	1948	6,986	1,475,637	1,525,907	36,606	49,219	65.8	3,346,499	1,486,045	432	..	63	12.7
	Texas & Pacific 1949	1,852	376,190	376,190	15,606	11,654	58.2	831,036	307,907	111	5	4	3.3
	1948	1,852	517,729	517,729	14,770	16,166	62.5	1,107,999	459,319	120	1	10	7.6
	St. Louis-San Francisco 1949	4,615	682,634	692,006	7,436	20,631	63.2	1,415,252	617,266	281	33	44	12.3
	1948	4,615	880,500	911,118	10,008	22,307	66.7	1,508,922	669,847	296	3	31	9.4
	St. Louis Southw. Lines 1949	1,562	368,490	370,662	4,964	14,099	69.8	877,284	292,158	84	7	15	14.2
	1948	1,568	407,125	409,403	5,702	15,926	75.0	938,552	419,546	92	8	9	8.3
	Texas & New Orleans 1949	4,314	768,985	769,131	28,279	23,374	69.5	1,549,181	690,178	214	1	36	14.3
	1948	4,314	963,362	964,949	19,476	26,702	71.7	1,715,346	761,090	219	..	29	11.7

*Report of trustee or trustees.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Items for the Month of February 1949 Compared with February 1948

	Region, road and year		Freight cars on line: Home	Foreign	Total	Per Cent. B.O.	G.t.m.per train-hr. excl.locos. and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd. car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daiiy ton-mi. per road-mi.	Train miles per train-hour†	Mi. per loco. per day
New Eng. Region	Boston & Maine	1949	2,316	8,203	10,519	2.6	37,699	2,311	953	26.2	890	50.0	5,222	16.4	92.5
		1948	1,373	14,434	15,807	2.7	30,833	2,297	1,006	27.5	712	36.7	6,550	13.5	118.0
	N. Y., N. H. & Htfd	1949	2,219	16,535	18,754	1.7	35,052	2,421	1,070	26.4	530	28.5	5,597	14.5	70.9
		1948	1,205	26,145	27,350	1.4	27,264	2,298	1,028	27.0	447	23.5	7,178	11.9	88.6
Great Lakes Region	Delaware & Hudson	1949	5,667	5,461	11,128	5.2	58,667	3,140	1,606	36.4	1,208	50.1	17,427	18.8	64.7
		1948	1,814	9,775	11,589	4.5	49,752	3,072	1,698	38.6	1,636	59.3	21,724	16.3	80.2
	Del., Lack. & Western	1949	7,374	9,087	16,461	5.7	45 149	2,951	1,337	30.2	691	33.9	12,020	15.5	83.3
		1948	3,802	17,189	20,991	3.2	37,741	2,733	1,287	30.4	787	35.4	15,621	14.0	118.9
	Erie	1949	10,976	16,089	27,065	5.9	54,241	3,304	1,400	27.0	1,010	55.4	12,245	16.5	69.7
		1948	5,258	31,788	37,046	3.5	51,553	3,262	1,452	28.3	1,133	57.2	17,251	15.9	91.8
	Grand Trunk Western	1949	4,998	7,164	12,162	9.3	41,888	2,125	902	27.2	545	30,1	7,094	19.8	122.9
		1948	3,360	11,591	14,951	5.9	36,978	2,059	906	27.6	569	29.5	8,709	18.1	140.9
	Lehigh Valley	1949	9,525	8,455	17,980	13.5	57,049	3,118	1,471	31.8	634	29.1	9,621	18.6	92.1
		1948	5,854	18,450	24,304	6.7	48,438	2,882	1,405	31.8	694	30.4	12,495	17.2	99.6
	New York Central	1949	69,824	80,543	150,367	5.3	40,498	2,467	1,122	32.1	738	37.4	10.707	16.6	86.6
		1948	47,034	122,731	169,765	3.0	33,073	2,440	1,149	32.7	686	32.7	11,205	13.8	93.8
	New York, Chic. & St. L.	1949	3,951	12,327	16,278	2.6	48,022	2,507	1,088	29.0	1,397	73.5	13,588	19.2	130.6
		1948	2,162	15,096	17,258	1.4	46,696	2,453	1,122	28.7	1,631	78.6	16,192	19.2	156.7
	Pitts. & Lake Erie	1949	6,227	9,903	16,130	6.6	50,136	3,288	1,904	49.8	378	12.1	27,770	15.3	72.1
		1948	2,606	10.878	13,484	5.7	47,415	3,166	1,841	50.2	512	16.2	28,928	15.0	88.8
	Wabash	1949	7,502	11,593	19,095	4.0	44,953	2,205	952	28.3	1,008	52.8	8,122	20.5	111.1
		1948	4,541	15,239	19,780	3.0	43,886	2,276	1,029	28.4	1,143	55.0	9,619	19.5	121.7
Central Eastern Region	Baltimore & Ohio	1949	57,994	34,588	92,582	8.0	35,006	2,656	1,289	36.4	807	35.9	12,146	13.4	72.2
		1948	39,190	47,959	87,149	6.4	30,278	2,447	1,224	35.8	956	40.3	13,515	12.6	86.4
	Central of New Jersey*	1949	1,046	8,987	10,033	5.7	39,354	2,935	1,532	38.5	324	12.8	7,682	14.0	70.3
		1948	744	11,114	11,858	4.0	36,030	2,958	1,610	39.7	331	12.6	9,660	12.6	80.2
	Central of Pennsylvania	1949	2,368	2,729	5,097	8.5	39,530	2,856	1,502	39.2	674	26.4	16,018	14.7	57.4
		1948	694	4,161	4,855	7.6	36,760	2,913	1,568	38.6	779	28.8	18,242	13.3	74.3
	Chicago & Eastern Ill	1949	2,787	3,516	6,303	7.1	42,384	2,507	1,206	33.7	931	42.5	5,971	16.9	70.1
		1948	1,382	4,399	5,781	4.2	36,401	2,166	1,095	33.4	1,041	43.9	6,334	17.2	89.7
	Elgin, Joliet & Eastern	1949	6,900	11,856	18,756	1.9	16,433	2,949	1,571	41.9	271	10.1	20,728	6.0	116.5
		1948	6,118	13,264	19,382	2.3	12,199	2,415	1,304	40.8	272	9.9	13,456	5 4	132.2
	Pennsylvania System	1949	141.346	92,206	233.552	8.8	40,185	2,827	1,343	34.6	611	28.6	14,301	14.6	76.9
		1948	106,475	129,006	235,481	10.3	32,842	2,684	1,306	34.1	684	29.6	16,303	12.8	83.5
	Reading	1949	16,452	17,275	33,727	5.3	38,111	2,877	1,532	42.6	585	22.2	14,872	13.3	69.8
		1948	7,797	25,677	33,474	3.3	32,300	2,648	1,452	42.0	660	23.7	16,414	12.2	81.1
	Western Maryland	1949	6,491	3,445	9,936	1.1	41,781	3,180	1,752	46.1	1,156	40.9	13,256	13.3	57.8
		1948	2,570	4,414	6,984	1.0	28,815	2,854	1,575	46.2	1,596	55.7	14,103	10.2	65.9
Pocahontas Region	Chesapeake & Ohio	1949	59,691	20,839	80,530	2.8	54,795	3.456	1,892	46.1	1,125	42.8	17,669	16.0	79.0
		1948	42,804	25,637	68,441	1.8	50,344	3,353	1,898	47.3	1,625	59.5	22,062	15.3	100.9
	Norfolk & Western	1949	37,123	6,385	43,508	5.0	66,331	4,080	2,207	47.8	1,244	45.5	25,059	16.5	92.4
		1948	27,625	7,673	35,298	2.5	60,510	3,920	2,151	48.7	1,763	63.0	28,978	15.7	115.4
Southern Region	Atlantic Coast Line	1949	11,832	16,208	28,040	3.3	29,802	1,776	751	29.2	816	46.6	4,176	16.8	73.0
		1948	8,511	21,748	30,259	5.5	27,938	1,774	790	30.2	890	46.5	4,871	15.8	91.4
	Central of Georgia	1949	3,037	5,206	8,243	8.6	29,733	1,639	766	30.8	833	38.1	3,954	18.2	93.1
		1948	1,653	5,441	7,094	4.3	29,781	1,638	786	31.2	1,000	43.9	4,266	18.2	101.3
	Gulf, Mobile & Ohio	1949	3,930	9,828	13,758	2.2	55,685	2,976	1,438	31.8	1,086	47.7	5,376	18.8	95.6
		1948	2,411	12,709	15,120	1.8	53,783	2,840	1,410	31.9	1,175	49.3	6,243	19.0	93.0
	Illinois Central	1949	23,300	29,143	52,443	2.5	43,767	2,468	1,161	33.6	1,044	49.8	8,472	18.0	82.2
		1948	16.496	35,081	51,577	1.5	41,792	2,494	1,183	33.2	1,165	54.8	9,234	17.0	87.7
	Louisville & Nashville	1949	39,262	13,032	52,294	3.7	30,482	1,887	959	37.3	794	34.4	8,600	16.2	104.5
		1948	25,380	17,467	42,847	4.3	27,145	1,879	990	38.4	1,188	48.1	10,984	14.5	126.9
	Nash., Chatt. & St. Louis	1949	2,040	4,026	6,066	8.6	34,939	1,734	803	29.4	933	46.4	5,648	20.2	108.2
		1948	1,459	6,394	7,853	4.4	28,152	1,486	706	29.9	882	38.5	6,356	19.0	111.0
	Seaboard Air Line	1949	10,126	13,248	23,374	1.6	37,235	2,118	913	30.5	991	52.2	5,671	18.0	98.0
		1948	5,914	18,459	24,373	1.5	33,870	1,989	901	31.0	1,097	53.0	6,209	17.5	109.9
	Southern	1949	17,791	29,319	47,110	4.2	33,144	1,913	825	28.4	795	43.4	5,717	17.5	75.4
		1948	12,790	31,903	44,693	3.8	28,993	1,728	790	29.1	972	47.7	6,756	17.0	92.6
Northwestern Region	Chicago & North Western	1949	20,617	29,586	50,203	2.7	30,100	2,156	944	30.5	558	28.2	3,567	15.0	81.5
		1948	17,170	36,262	53,432	3.7	30,854	2,227	1,022	30.0	590	28.2	3,899	14.5	77.5
	Chicago Great Western	1949	1,942	5,348	7,290	5.4	46,907	3,142	1,365	29.0	1,117	58.5	5,798	14.9	104.7
		1948	1,067	5,149	6,216	3.5	37,212	2,359	1,050	29.0	1,407	69.5	5,828	15.8	105.3
	Chic., Milw., St. P. & Pac.	1949	30,199	32,510	62,709	1.5	32,379	2,157	973	30.8	735	36.5	4,262	15.2	92.3
		1948	20,522	49,997	70,519	1.9	29,590	2,137	1,001	31.2	690	32.1	4,555	14.2	92.0
	Chic., St. P., Minn. & Omaha	1949	1,283	7,103	8,386	3.4	23,464	1,797	796	31.3	662	32.9	3,483	13.6	77.7
		1948	801	7,943	8,744	6.1	22,248	1,787	792	31.9	666	32.6	3,721	12.9	82.9
	Duluth, Missabe & Iron Range	1948	14,976	838	15,814	3.5	17,793	1,342	613	33.6	46	2.6	1,239	13.7	29.8
		1948	14,331	630	14,961	2.9	15,072	1,182	527	31.8	37	2.2	971	13.3	25.8
	Great Northern	1949	24,994	18,233	43,227	3.7	34,172	2,221	1,006	30.6	796	38.1	4.090	15.5	86.1
		1948	19,164	23,114	42,278	3.2	36,215	2,319	1,023	30.8	818	41.4	4,297	15.7	81.3
	Minneap., St.P. & S. Ste. M.	1949	6,652	8,857	15,509	5.6	33,331	1,947	898	30.4	726	36.0	2 644	17.3	107.8
		1948	5,579	10,902	16,481	3.3	29,628	1,797	869	30.6	753	33.9	2,944	16.7	112.6
	Northern Pacific	1949	20,182	15,655	35,837	8.3	39,436	2,484	1,185	32.3	880	38.3	4,775	16.0	78.1
		1948	16,063	18,563	34,626	5.5	40,649	2,471	1.188	32.4	917	39.4	4,997	16.6	81.2
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1949	46,264	28,736	75,000	4.9	49,930	2,454	984	26.5	1,133	64.3	6,340	20.5	104.3
		1948	34,617	30,354	64,971	5.6	47,810	2,379	1,005	27.5	1,307	68.8	6,711	20.2	105.0
	Chic., Burl. & Quincy	1949	18,977	26,977	45,954	4.0	46,924	2,754	1,230	31.7	1,111	56.2	5,812	17.1	90.9
		1948	13,567	28,738	42,305	2.5	45,757	2,686	1,234	32.1	1,339	64.9	6,571	17.1	99.7
	Chic., Rock I. & Pac.	1949	12,138	23,065	35,203	4.1	37,920	2,188	949	29.5	986	53.0	4,807	17.4	112.0
		1948	8,623	24,527	33,150	4.5	36,758	2,105	932	28.6	1,101	57.1	4,991	17.5	113.6
	Denver & R. G. Wn.	1949	7,725	9,453	17,178	5.7	35,997	2,372	1,180	31.8	1,030	41.7	6,654	15.3	91.4
		1948	6,731	6,521	13,252	4.4	35,563	2,181	1,116	35.3	1,047	40.7	5,740	16.5	73.5
	Southern Pacific	1949	27,208	33,778	60,986	4.0	44,783	2,752	1,190	27.8	1,115	56.5	8,283	16.5	84.0
		1948	22,446	36,409	58,855	3.3	45,167	2,782	1,221	28.4	1,288	64.2	9,560	16.4	98.0
	Union Pacific	1949	28,948	36,101	65,049	3.3	43,909	2,324	982	29.9	895	47.1	5,971	19.3	90.8
		1948	24,945	29,071	54,016	3.3	54,540	2,664	1,167	29.2	1,545	75.8	8,692	20.7	107.7
	Western Pacific	1949	2,145	2,720	4,865	8.4	51,825	2,686	1,270	30.0	1,744	76.7	6,758	19.4	66.8
		1948	2,042	3,553	5,595	5.6	57,667	2,704	1,328	30.4	1,860	77.1	8,223	21.4	73.8
Southwestern Region	International-Gt. Northern*	1949	788	6,908	7,696	.8	42,657	2,250	1,001	31.8	871	43.6	5,803	19.1	98.0
		1948	487	6,530	7,017	1.2	34,086	1,878	852	31.8	1,052	49.6	6,487	18.4	114.7
	Kansas City Southern	1949	1,607	6,232	7,839	4.6	64,774	3,329	1,536	32.6	1,207	57.1	10,318	19.6	130.6
		1948	1,205	5,379	6,584	2.9	55,375	2,949	1,383	32.0	1,408	65.6	10,692	18.9	136.3
	Mo.-Kans.-Texas Lines	1949	3,430	7,313	10,743	2.3	40,532	2,195	950	30.1	1,588	87.5	5,352	18.7	134.5
		1948	1,694	7,751	9,445	.6	40,709	2,180	959	28.6	1,541	81.8	4,585	18.7	109.6
	Missouri Pacific*	1949	15,768	19,755	35,523	2.3	44,397	2,265	978	30.1	1,230	64.8	6,467	19.7	112.0
		1948	13,445	24,060	37,505	2.0	41,530	2,279	1,012	30.2	1,338	67.3	7,335	18.3	112.8
	Texas & Pacific	1949	2,162	6,406	8,568	3.9	46,856	2,216	821	26.4	1,242	80 7	5,938	21.2	123.7
		1948	1,355	8,271	9,626	1.8	39,786	2,162	896	28.4	1,609	90.7	8,552	18.6	149.6
	St. Louis-San Francisco	1949	9,606	12,617	22,223	2.4	40,888	2,081	907	29.9	1,005	53.1	4,777	19.7	74.4
		1948	5,144	13,830	18,974	1.8	34,826	1,721	764	30.0	1,194	59.6	5,005	20.3	100.8
	St. Louis Southw. Lines	1949	1,929	5,351	7,280	1.7	45,267	2,386	1,066	27.8	1,978	101.8	8,966	19.0	136.1
		1948	1,304	6,460	7,764	2.1	43,415	2,309	1,032	26.3	1,937	98.1	9,226	18.8	141.6
	Texas & New Orleans	1949	4,825	16,204	21,029	2.2	39,990	2,040	909	29.5	1,186	57.8	5,714	19.9	120.0
		1948	3,768	15,721	19,489	3.1	35,824	1,799	798	28.5	1,340	65.5	6,084	20.1	144.1

†In the *Railway Age* of April 30, this column was improperly headed "Coal—lb. per 1000 g.t.m. inc. loco." Figures shown therein, however, gave correct data for "Train-miles per train-hour."

What's in a Name Plate?

The answer in this case can be found in the performance records set up by General Motors Diesel locomotives since 1934.

Any number of General Motors locomotive units have passed the million mile mark. Four have covered more than 4,000,000 miles each — by far the record for any self-propelled vehicle running on land.

What accounts for such performance? Is it just the fact that these locomotives are "Diesels"?

No — it goes beyond that. It is because they are GENERAL MOTORS DIESELS.

For behind this name plate is an unmatched background of experience in Diesel motive power development, more than two decades of constant research and improvement, more than two billion unit miles of actual experience on the rails.

Back of it, also, is not only the world's largest plant devoted to Diesel locomotive production, but the most modern, the most carefully planned and the most exactingly controlled manufacturing processes in the industry.

Here at Electro-Motive all phases of locomotive construction—the design and manufacture of all components as well as their assembly—are centered in a single organization with a single responsibility.

All these—plus a policy that assures ready availability of parts and service — are reasons why locomotives bearing the General Motors name plate enjoy such a commanding preference on American railroads.

ELECTRO-MOTIVE

GENERAL MOTORS LOCOMOTIVES

DIVISION OF GENERAL MOTORS

Home of the Diesel Locomotive

LA GRANGE, ILL.

Items for the Month of February 1949 Compared with February 1948

Region, road and year		Freight cars on line: Home	Foreign	Total	Per Cent. B.O.	G.t.m.per train-hr. excl.locos. and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd. car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daiiy ton-mi. per road-mi.	Train miles per train-hour†	Mi. per loco. per day
New Eng. Region	Boston & Maine 1949	2,316	8,203	10,519	2.6	37,699	2,311	953	26.2	890	50.0	5,222	16.4	92.5
	1948	1,373	14,434	15,807	2.7	30,833	2,297	1,006	27.5	712	36.7	6,550	13.5	118.0
	N. Y., N. H. & Htfd 1949	2,219	16,535	18,754	1.7	35,052	2,421	1,070	26.4	530	28.5	5,597	14.5	70.9
	1948	1,205	26,145	27,350	1.4	27,264	2,298	1,028	27.0	447	23.5	7,178	11.9	88.6
Great Lakes Region	Delaware & Hudson 1949	5,667	5,461	11,128	5.2	58,667	3,140	1,606	36.4	1,208	50.1	17,427	18.8	64.7
	1948	1,814	9,775	11,589	4.5	49,752	3,072	1,698	38.6	1,636	59.3	21,724	16.3	80.2
	Del., Lack. & Western 1949	7,374	9,087	16,461	5.7	45 149	2,951	1,337	30.2	691	33.9	12,020	15.5	83.3
	1948	3,802	17,189	20,991	3.2	37,741	2,733	1,287	30.4	787	35.4	15,621	14.0	118.9
	Erie 1949	10,976	16,089	27,065	5.9	54,241	3,304	1,400	27.0	1,010	55.4	12,245	16.5	69.7
	1948	5,258	31,788	37,046	3.5	51,553	3,262	1,452	28.3	1,133	57.2	17,251	15.9	91.8
	Grand Trunk Western 1949	4,998	7,164	12,162	9.3	41,888	2,125	902	27.2	545	30,1	7,094	19.8	122.9
	1948	3,360	11,591	14,951	5.9	36,978	2,059	906	27.6	569	29.5	8,709	18.1	140.9
	Lehigh Valley 1949	9,525	8,455	17,980	13.5	57,049	3,118	1,471	31.8	634	29.1	9,621	18.6	92.1
	1948	5,854	18,450	24,304	6.7	48,438	2,882	1,405	31.8	694	30.4	12,495	17.2	99.6
	New York Central 1949	69,824	80,543	150,367	5.3	40,498	2,467	1,122	32.1	738	37.4	10.707	16.6	86.6
	1948	47,034	122,731	169,765	3.0	33,073	2,440	1,149	32.7	686	32.7	11,205	13.8	93.8
	New York, Chic. & St. L 1949	3,951	12,327	16,278	2.6	48,022	2,507	1,088	29.0	1,397	73.5	13,588	19.2	130.6
	1948	2,162	15,096	17,258	1.4	46,696	2,453	1,122	28.7	1,631	78.6	16,192	19.2	156.7
	Pitts. & Lake Erie 1949	6,227	9,903	16,130	6.6	50,136	3,288	1,904	49.8	378	12.1	27,770	15.3	72.1
	1948	2,606	10,878	13,484	5.7	47,415	3,166	1,841	50.2	512	16.2	28,928	15.0	88.8
	Wabash 1949	7,502	11,593	19,095	4.0	44,953	2,205	952	28.3	1,008	52.8	8,122	20.5	111.1
	1948	4,541	15,239	19,780	3.0	43,886	2,276	1,029	28.4	1,143	55.0	9,619	19.5	121.7
Central Eastern Region	Baltimore & Ohio 1949	57,994	34,588	92,582	8.0	35,006	2,656	1,289	36.4	807	35.9	12,146	13.4	72.2
	1948	39,190	47,959	87,149	6.4	30,278	2,447	1,224	35.8	956	40.3	13,515	12.6	86.4
	Central of New Jersey* 1949	1,046	8,987	10,033	5.7	39,354	2,935	1,532	38.5	324	12.8	7,682	14.0	70.3
	1948	744	11,114	11,858	4.0	36,030	2,958	1,610	39.7	331	12.6	9,660	12.6	80.2
	Central of Pennsylvania 1949	2,368	2,729	5,097	8.5	39,530	2,856	1,502	39.2	674	26.4	16,018	14.7	57.4
	1948	694	4,161	4,855	7.6	36,760	2,913	1,568	38.6	779	28.8	18,242	13.3	74.3
	Chicago & Eastern Ill 1949	2,787	3,516	6,303	7.1	42,384	2,507	1,206	33.7	931	42.5	5,971	16.9	70.1
	1948	1,382	4,399	5,781	4.2	36,401	2,166	1,095	33.4	1,041	43.9	6,334	17.2	89.7
	Elgin, Joliet & Eastern 1949	6,900	11,856	18,756	1.9	16,433	2,949	1,571	41.9	271	10.1	20,728	6.0	116.5
	1948	6,118	13,264	19,382	2.3	12,199	2,415	1,304	40.8	272	9.9	13,456	5 4	132.2
	Pennsylvania System 1949	141.346	92,206	233.552	8.8	40,185	2,827	1,343	34.6	611	28.6	14,301	14.6	76.9
	1948	106,475	129,006	235,481	10.3	32,842	2,684	1,306	34.1	684	29.6	16,303	12.8	83.5
	Reading 1949	16,452	17,275	33,727	5.3	38,111	2,877	1,532	42.6	585	22.2	14,372	13.3	69.8
	1948	7,797	25,677	33,474	3.3	32,300	2,648	1,452	42.0	660	23.7	16,414	12.2	81.1
	Western Maryland 1949	6,491	3,445	9,936	1.1	41,781	3,180	1,752	46.1	1,156	40.9	13,256	13.3	57.8
	1948	2,570	4,414	6,984	1.0	28,815	2,854	1,575	46.2	1,596	55.7	14,103	10.2	65.9
Pocahontas Region	Chesapeake & Ohio 1949	59,691	20,839	80,530	2.8	54,795	3,456	1,892	46.1	1,125	42.8	17,669	16.0	79.0
	1948	42,804	25,637	68,441	1.8	50,344	3,355	1,898	47.3	1,625	59.5	22,062	15.3	100.9
	Norfolk & Western 1949	37,123	6,385	43,508	5.0	66,331	4,080	2,207	47.8	1,244	45.5	25,059	16.5	92.4
	1948	27,625	7,673	35,298	2.5	60,510	3,920	2,151	48.7	1,763	63.0	28,978	15.7	115.4
Southern Region	Atlantic Coast Line 1949	11,832	16,208	28,040	3.3	29,802	1,776	751	29.2	816	46.6	4,176	16.8	73.0
	1948	8,511	21,748	30,259	5.5	27,938	1,774	790	30.2	890	46.5	4,871	15.8	91.4
	Central of Georgia 1949	3,037	5,206	8,243	8.6	29,733	1,639	766	30.8	833	38.1	3,954	18.2	93.1
	1948	1,653	5,441	7,094	4.3	29,781	1,638	786	31.2	1,000	43.9	4,266	18.2	101.3
	Gulf, Mobile & Ohio 1949	3,930	9,828	13,758	2.2	55,685	2,976	1,438	31.8	1,086	47.7	5,376	18.8	95.6
	1948	2,411	12,709	15,120	1.8	53,783	2,840	1,410	31.9	1,175	49.3	6,243	19.0	93.0
	Illinois Central 1949	23,300	29,143	52,443	2.5	43,767	2,468	1,161	33.6	1,044	49.8	8,472	18.0	82.2
	1948	16,496	35,081	51,577	1.5	41,792	2,491	1,183	33.2	1,165	54.8	9,234	17.0	87.7
	Louisville & Nashville 1949	39,262	13,032	52,294	3.7	30,482	1,887	959	37.3	794	34.4	8,600	16.2	104.5
	1948	25,380	17,467	42,847	4.3	27,145	1,879	990	38.4	1,133	48.1	10,984	14.5	126.9
	Nash., Chatt. & St. Louis 1949	2,040	4,026	6,066	8.6	34,939	1,734	803	29.4	933	46.4	5,648	20.2	108.2
	1948	1,459	6,394	7,853	4.4	28,152	1,486	706	29.9	882	38.5	6,356	19.0	111.0
	Seaboard Air Line 1949	10,126	13,248	23,374	1.6	37,235	2,118	913	30.5	991	52.2	5,671	18.0	98.0
	1948	5,914	18,459	24,373	1.5	33,870	1,989	901	31.0	1,097	53.0	6,209	17.5	109.9
	Southern 1949	17,791	29,319	47,110	4.2	33,144	1,913	825	28.4	795	43.4	5,717	17.5	75.4
	1948	12,790	31,903	44,693	3.8	28,993	1,728	790	29.1	972	47.7	6,756	17.0	92.6
Northwestern Region	Chicago & North Western 1949	20,617	29,586	50,203	2.7	30,100	2,156	944	30.5	558	28.2	3,567	15.0	81.5
	1948	17,170	36,262	53,432	3.7	30,854	2,227	1,022	30.0	590	28.2	3,899	14.5	77.5
	Chicago Great Western 1949	1,942	5,348	7,290	5.4	46,907	3,142	1,365	29.0	1,117	58.5	5,798	14.9	104.7
	1948	1,067	5,149	6,216	3.5	37,212	2,359	1,050	29.0	1,407	69.5	5,828	15.8	105.3
	Chic., Milw., St. P. & Pac 1949	30,199	32,510	62,709	1.5	32,379	2,157	973	30.8	735	36.5	4,262	15.2	92.3
	1948	20,522	49,997	70,519	1.9	29,590	2,137	1,001	31.2	690	32.1	4,555	14.2	92.0
	Chic., St. P., Minn. & Omaha 1949	1,283	7,103	8,386	3.4	23,464	1,797	796	31.3	662	32.9	3,483	13.6	77.7
	1948	801	7,943	8,744	6.1	22,248	1,787	792	31.9	666	32.6	3,721	12.9	82.9
	Duluth, Missabe & Iron Range 1949	14,976	838	15,814	3.5	17,793	1,342	613	33.6	46	2.6	1,239	13.7	29.8
	1948	14,331	630	14,961	2.9	15,072	1,182	527	31.8	37	2.2	971	13.3	25.8
	Great Northern 1949	24,994	18,233	43,227	3.7	34,172	2,221	1,006	30.6	796	38.1	4.090	15.5	86.1
	1948	19,164	23,114	42,278	3.2	36,215	2,319	1,023	30.8	818	41.4	4,297	15.7	81.3
	Minneap., St.P. & S. Ste. M 1949	6,652	8,857	15,509	5.6	33,331	1,947	898	30.4	726	36.0	2 644	17.3	107.8
	1948	5,579	10,902	16,481	3.3	29,628	1,797	869	30.6	753	33.9	2,944	16.7	112.6
	Northern Pacific 1949	20,182	15,655	35,837	8.3	39,436	2,484	1,185	32.3	880	38.3	4,775	16.0	78.1
	1948	16,063	18,563	34,626	5.5	40,649	2,471	1,188	32.4	917	39.4	4,997	16.6	81.2
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1949	46,264	28,736	75,000	4.9	49,930	2,454	984	26.5	1,133	64.3	6,340	20.5	104.3
	1948	34,617	30,354	64,971	5.6	47,810	2,379	1,005	27.5	1,307	68.8	6,711	20.2	105.0
	Chic., Burl. & Quincy 1949	18,977	26,977	45,954	4.0	46,924	2,754	1,230	31.7	1,111	56.2	5,812	17.1	90.9
	1948	13,567	28,738	42,305	2.5	45,757	2,686	1,234	32.1	1,339	64.9	6,571	17.1	99.7
	Chic., Rock I. & Pac 1949	12,138	23,065	35,203	4.1	37,920	2,188	949	29.5	986	53.0	4,807	17.4	112.0
	1948	8,623	24,527	33,150	4.5	36,758	2,105	932	28.6	1,101	57.1	4,991	17.5	113.6
	Denver & R. G. Wn 1949	7,725	9,453	17,178	5.7	35,997	2,372	1,180	31.8	1.030	41.7	6,654	15.3	91.4
	1948	6,731	6,521	13,252	4.4	35,563	2,181	1,116	35.3	1,047	40.7	5,740	16.5	73.5
	Southern Pacific 1949	27,208	33,778	60,986	4.0	44,783	2,752	1,190	27.8	1,115	56.5	8,283	16.5	84.0
	1948	22,446	36,409	58,855	3.3	45,167	2,782	1,221	28.4	1,288	64.2	9,560	16.4	98.0
	Union Pacific 1949	28,948	36,101	65,049	3.3	43,909	2,324	982	29.9	895	47.1	5,971	19.3	90.8
	1948	24,945	29,071	54,016	3.3	54,540	2,661	1,167	29.2	1,545	75.8	8,692	20.7	107.7
	Western Pacific 1949	2,145	2,720	4,865	8.4	51,825	2,686	1,270	30.0	1,744	76.7	6,758	19.4	66.8
	1948	2,042	3,553	5,595	5.6	57,667	2,704	1,328	30.4	1,860	77.1	8,223	21.4	73.8
Southwestern Region	International-Gt. Northern* 1949	788	6,908	7,696	.8	42,657	2,250	1,001	31.8	871	43.6	5,803	19.1	98.0
	1948	487	6,530	7,017	1.2	34,086	1,878	852	31.8	1,052	49.6	6,487	18.4	114.7
	Kansas City Southern 1949	1,607	6,232	7,839	4.6	64,774	3,329	1,536	32.6	1,207	57.1	10,818	19.6	130.6
	1948	1,205	5,379	6,584	2.9	55,375	2,949	1,383	32.0	1,408	65.6	10,692	18.9	136.3
	Mo.-Kans.-Texas Lines 1949	3,430	7,313	10,743	2.3	40,532	2,195	950	30.1	1,588	87.5	5,352	18.7	134.5
	1948	1,694	7,751	9,445	.6	40,709	2,180	959	28.6	1,541	81.8	4,585	18.7	109.6
	Missouri Pacific* 1949	15,768	19,755	35,523	2.3	44,397	2,265	978	30.1	1,230	64.8	6,467	19.7	112.0
	1948	13,445	24,060	37,505	2.0	41,530	2,279	1,012	30.2	1,338	67.3	7,335	18.3	112.8
	Texas & Pacific 1949	2,162	6,406	8,568	3.9	46,856	2,216	821	26.4	1,242	80.7	5,938	21.2	123.7
	1948	1,355	8,271	9,626	1.8	39,786	2,162	896	28.4	1,609	90.7	8,552	18.6	149.6
	St. Louis-San Francisco 1949	9,606	12,617	22,223	2.4	40,888	2,081	907	29.9	1,005	53.1	4,777	19.7	74.4
	1948	5,144	13,830	18,974	1.8	34,826	1,721	764	30.0	1,194	59.6	5,005	20.3	100.8
	St. Louis Southw. Lines 1949	1,929	5,351	7,280	1.7	45,267	2,386	1,066	27.8	1,978	101.8	8,966	19.0	136.1
	1948	1,304	6,460	7,764	2.1	43,415	2,309	1,032	26.3	1,937	98.1	9,226	18.8	141.6
	Texas & New Orleans 1949	4,825	16,204	21,029	2.2	39,990	2,040	909	29.5	1,186	57.8	5,714	19.9	120.0
	1948	3,768	15,721	19,489	3.1	35,824	1,799	798	28.5	1,340	65.5	6,084	20.1	144.1

†In the *Railway Age* of April 30, this column was improperly headed "Coal—lb. per 1000 g.t.m. inc. loco." Figures shown therein, however, gave correct data for "Train-miles per train-hour."

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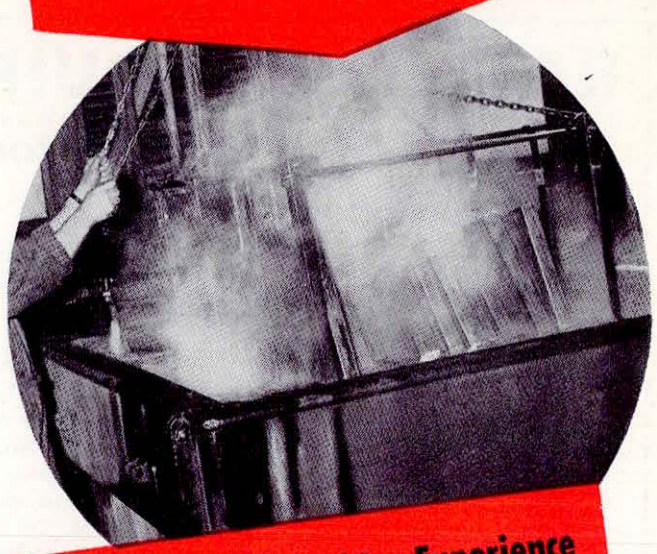

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Yet, when business competition gets a little stiff, there are always some companies whose first impulse is to take their foot off the accelerator— to cut down on their selling efforts —on their advertising and sales promotion.

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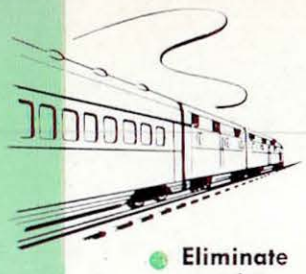
STEEL *in stock at* **RYERSON**

Thousands of kinds, shapes and sizes of steel are ready for quick shipment from Ryerson to any shop along your line. Call Joseph T. Ryerson & Son, Inc. Plants: Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City, Pittsburgh, Los Angeles, San Francisco.

BARS—carbon & alloy, hot rolled & cold finished
STRUCTURALS—channels, angles, beams, etc.
PLATES—sheared & U. M., Inland 4-Way Floor Plate
SHEETS—hot & cold rolled, many types and coatings
TUBING—boiler & mechanical, seamless & welded
STAINLESS—Allegheny plates, sheets, bars, tubes

GREATER SAFETY ...LONGER LIFE with TYPE H TIGHTLOCK COUPLERS



- Eliminate slack and noise between couplers.
- Provide greater passenger comfort.
- Intercouple with existing standard couplers, materially reducing contour slack.
- Insure positive engagement when coupling at low speeds.
- Increase safety against accidental uncoupling.
- Reduce fatigue failures.
- Increase service life.

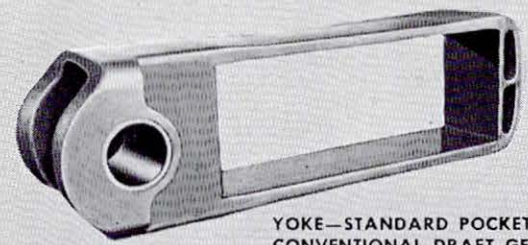
DETAILS AVAILABLE IN CIRCULAR NO. 1245

RADIAL CONNECTION

RETAINER

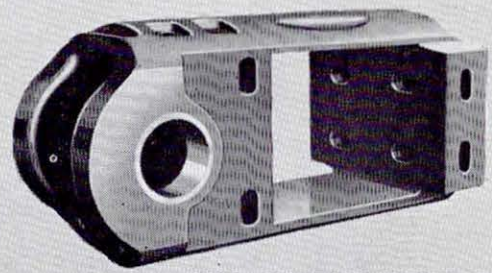
RADIAL CONNECTION SEAT

SHANK PIN



YOKE—STANDARD POCKET FOR CONVENTIONAL DRAFT GEAR APPLICATION

YOKE PIN



YOKE—STANDARD POCKET FOR TWIN DRAFT GEAR APPLICATION

THE SYMINGTON-GOULD CORPORATION

Works: DEPEW, NEW YORK

New York • Chicago • St. Louis • Boston • San Francisco • *In Canada:* ADANAC SUPPLIES, LTD., Montreal, Que.

What's in a Name Plate?

The answer in this case can be found in the performance records set up by General Motors Diesel locomotives since 1934.

Any number of General Motors locomotive units have passed the million mile mark. Four have covered more than 4,000,000 miles each — by far the record for any self-propelled vehicle running on land.

What accounts for such performance? Is it just the fact that these locomotives are "Diesels"?

No — it goes beyond that. It is because they are GENERAL MOTORS DIESELS.

For behind this name plate is an unmatched background of experience in Diesel motive power development, more than two decades of constant research and improvement, more than two billion unit miles of actual experience on the rails.

Back of it, also, is not only the world's largest plant devoted to Diesel locomotive production, but the most modern, the most carefully planned and the most exactingly controlled manufacturing processes in the industry.

Here at Electro-Motive all phases of locomotive construction—the design and manufacture of all components as well as their assembly—are centered in a single organization with a single responsibility.

All these—plus a policy that assures ready availability of parts and service — are reasons why locomotives bearing the General Motors name plate enjoy such a commanding preference on American railroads.

ELECTRO-MOTIVE

DIVISION OF GENERAL MOTORS

LA GRANGE, ILL.

GENERAL MOTORS LOCOMOTIVES

Home of the Diesel Locomotive